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Next Month

Most popular and widely used section of American Business, according to reports from readers, is Office Management in War. Much as we hate war, glad as we will be when we win and it is over, we must admit that war cleans out many ancient methods, practices, and wasteful operations which would never be abolished at any other time.

With new shortages and new restrictions being announced daily, business must grow more and more accustomed to operating on a stripped-for-action basis. No executive can think of everything, and this is the reason why an exchange of ideas, such as is published in every issue, makes the magazine more valuable now than ever before.

Our staff and many contributors are searching offices everywhere for more new ideas to report in 1942—two remaining issues. If you spear one yourself, let us know about it, please.

What to do when the war ends is a problem many business leaders have been too busy to consider. Nevertheless, some business leaders are doing something about it, for they realize that business will never go back to the same methods or patterns which existed in 1939 when the war began. First of a series on this subject begins soon.

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To Make **WAR-TIME EXPANSION** *A Peace-Time Asset*

THROUGH chemical research *now,* many far-sighted businessmen are developing the methods by which war-time additions to plant and machinery can be kept busy when Victory is won.

The diversified experience of the Edwal staff of consulting chemists is available for your post-war planning. Whether or not you have your own research laboratory, there are many advantages in bringing to bear on your problems the competent outside viewpoint of Edwal chemists. Write for a copy of the interesting booklet 26A *"How the Independent Chemist Can Help You."*

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LETTERS *and* COMMENT

Control of Visitors A Problem

To the Editor:

Have you any suggestions as to the type of form the receptionist in a modern office is to use in receiving callers? We wish to adopt a system here in our office whereby we have a permanent record of every caller, what company or whom he represents, what department or executive he wishes to call on, with whom he had made an appointment, etc. Seemingly, this sort of information is becoming all the more necessary at this particular time during the war program.

No doubt, you have some ready forms or suggestions to offer that probably have been submitted to you by other concerns which recently built a new office, an extra reception room, or so on. If you do not have any such forms on hand, perhaps you can suggest or lead me on to someone who could give me the proper information. — JOSEPH A. OPPENHEIM, *treasurer, New Idea, Inc., Coldwater, Ohio.*

MR. OPPENHEIM: We have sent you clippings of an article from our January 1942 issue, "How to Control Factory Visitors," which describes a system in wide use in many plants for the purpose of making a permanent record of every caller. This system was developed by the Standard Register Company of Dayton, Ohio. Other register companies, such as United Autographic Register Company, Egry Register Company, have similar systems.

Recently one of our editors visited the office of Willys-Overland Motors, Inc., at Toledo, Ohio, and found this system in use and he was told that it has proved highly satisfactory. There are many other plants, too, which use this same plan, such as Cummings Perforator Company, Buick, and the Victor Adding Machine Company.

The Anonymous Letter Writer at It Again

To the Editor:

It was a pleasing experience to read and reread "Colored Help in Offices." This change in attitude toward Negro office workers is to be commended. Thinking in this direction seems to be the general trend over all the country. It is agreed that if Negro women and men are given an equal opportunity to demonstrate their ability, the percentage of those who make good will compare favorably with those of any other group of office workers. You are to be congratulated.—L. C. BLOUNT, *secretary-general manager, The Great Lakes Mutual Insurance Company, Detroit, Michigan.*

To the Editor:

I have just read with considerable amazement your advocacy of the use of colored stenographers and office help. Washington offices may hire such help for vote-getting purposes, but I doubt if any self-respecting American office is going to do any such thing. It is sug-

gested that you use the pages of your magazine for something more worthy.

Regardless of whether an employee might believe in such a thing, most office employees will not work under such conditions, and it will thus reduce rather than help to build up office employment. Think of something better.—*An anonymous letter from Cincinnati, Ohio.*

Wants Book on Filing

To the Editor:

In the June issue of your magazine on page 36, describing new books, you mention that the editors would be glad to suggest books for specific needs or training. Our company is planning to remodel parts of its office and will enlarge our present vault so that we will need to change and modernize our entire filing system.

Can you suggest any good book on filing practices or plans which might help us?—VELVA DAVIS, *assistant credit manager, Southern Lumber Company, Warren, Arkansas.*

MISS DAVIS: The best book so far as we know on filing is *How to File and Index* by Bertha M. Weeks, published by the Ronald Press Company, New York. The price is $2.50.

Department vs. Central Mail Handling

To the Editor:

Is it standard practice for each department of a company to insert its own mail in the envelopes, then forward it to the central mailing department to be put through the mailing machine for sealing and stamping? Or, should the mail go to the central mailing department for insertion as well as stamping and sealing? Your answer will be appreciated.—R. A. SCHMIDT, *assistant treasurer, Rock-Ola Manufacturing Corporation.*

MR. SCHMIDT: Modern practice is to require the mailing department to do as much work as possible. There are many reasons for this. Today, stenographers are usually overworked. Their salaries are usually higher than mailing room employees. The mailing department usually folds the letters, seals and stamps envelopes. Where a mailing department is equipped with modern Postage Meter machines, sealing and printing the postage indicia are one operation. There is a postage saving in sending all letters, unsealed to the mailing department because it is often true that more than one department writes the same person the same day. When this is true the same envelope carries all letters. It is especially true in mail for branch office, big customers, salesmen, and field employees. Each may receive letters, statements, messages from several departments daily. Sorting the mail, to catch these multiple messages to same persons and put them in the same envelope, saves considerable postage.

HELPING BURROUGHS USERS MEET TODAY'S PROBLEMS WITH THEIR PRESENT EQUIPMENT

Suggestions like these may help you to obtain more posting hours a day with your machines

Relieve the operator of non-posting work—

Have a clerk do the pre-listing, stuffing, checking for errors, heading new accounts, and so on.

Keep the machine producing steadily—

Assign a substitute to the machine during the operator's rest periods, lunch hours, vacations.

Combine records or tasks—

Post related records together, and obtain statistics or figures for reports as a by-product of regular routines.

Take full advantage of machine features—

Make sure that the operators are thoroughly familiar with all keyboard controls, automatic features and the various special time-saving advantages built into the machines they are using.

For many other suggestions that will help you get the most out of your present Burroughs equipment, telephone your local Burroughs office, or, if you prefer, write direct to—

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Burroughs

FOR VICTORY—BUY UNITED STATES WAR BONDS AND STAMPS

The TREND of Business

as seen by the publisher

STACY MAY, speaking before the national convention of the Controllers Institute of America, stated that 1942 war expenditures by the federal government will be well over $50,000,000,000 with a national income of $115,000,000,000. In 1943, he said, government expenditures for war will approximate $90,000,000,000 with a somewhat larger national income. When you consider that two-thirds of our war expenditures are financed by credit inflation, you get a blueprint for the 1943 business outlook. In spite of the measures taken, this country has not yet set up the machinery to stop rising wages, higher costs, and soaring prices. What has been done will help, but it is not the answer. Therefore, business men should plan accordingly. We are on our way to a higher price level, the highest in our history. The test will be whether through federal controls, we can maintain this new high cost level after the war, and also maintain the national income at the mark necessary to finance the new level. Your guess is as good as the next fellow's.

Bring WPB to Chicago

The most practical suggestion we have heard for relieving the congestion in Washington at once, and at the same time saving millions of travel hours for war production executives, both in and out of government, would be to move the War Production Board to Chicago. The suggestion was made by John Van Deventer, veteran *Iron Age* editor, before the Sales Executives' Club of New York. If the Furniture Mart would not be big enough to house the entire unit, then the Government might take over Sears, Roebuck and Company and use its plant facilities for offices. Most of Sears' executives are already working for WPB, so they could come back home. Mr. Van Deventer is also of the opinion that some of the congestion in the capital is due to an oversupply of big executives. "Too many of them," he said, "are called in to do the heavy thinking and too few to do the work. It is like a rowboat filled with admirals with nobody to pull the oars." If we could get the WPB installed in a nice, roomy edifice like the Furniture Mart or the Sears, Roebuck plant which covers many acres, there would be ample room not only for the thinkers but for the workers. Anyhow, it is something to worry about. As it is, the WPB is getting spread out all over Washington.

Labor at Yale

Don't be surprised one of these days when you go into a labor conference to negotiate a wage contract if you sit across the table from a man with a Yale accent—if there is such a thing. Yale has put one over on Princeton, long regarded as the fountain head of progressive labor relations thinking, and awarded ten scholarships for picked labor leaders. That is certainly a forward step in the right direction, and it is to be hoped that other eastern colleges will follow suit. We are going to need the best brains in the labor movement in the adjustment which must come after the war. If Yale or any other higher institution of learning can contribute anything, it is indeed a public service of the highest order. As we have stated before in these columns, we believe a new era in labor-management relations has dawned in this country, largely as a result of the labor-management relationship which has been started in the so-called Nelson war drive committees. For the first time in many industrial plants, management and labor have found that they could sit down and put their feet under the table and learn a great deal from each

other. Labor learned that managing a complex industrial plant was not nearly so simple as it looked. Management learned to appreciate labor's viewpoint and found that the man in the shop was interested in a lot of things besides what he pulled out of his pay envelope on Friday night. This cooperative spirit is to the good. Out of it may well come a much-needed design for post-war labor relations.

Negro Pressure Groups

The other day I attended a conference held by the Chicago Urban League to discuss the problem of the Negro in industry. One Negro speaker after another railed at industry for its refusal to employ more Negroes and to accord them equal rights with Whites. It left us rather cold. While we are in sympathy with the desire of the Negro to improve his lot and have only the greatest respect for members of that race who have made good, we are wholly out of sympathy with the shotgun methods some of these Negro organizations are using to bludgeon employers into hiring workers they do not wish to hire, whether they be white or black, Protestants or Catholics, Jews or Gentiles. Moreover, we are convinced that racial and religious pressure groups are doing the cause of their people a great injury. Even though the Urban League succeeds in bludgeoning an occasional employer into hiring more Negros, for every one thus high pressured a thousand enemies for the Negro people are made. Illustrating the point, the Chicago Urban League put on a campaign this summer to force the village authorities in a certain Chicago suburb to open its bathing beach to Negroes as well as Whites. The Negroes won the fight. But they also made bitter enemies of six thousand Whites who live in the community, *many of whom are employers*. It is safe to say that all the good which the Chicago Urban League hoped to do through its Waukegan conference was more than offset by its ill-advised tactics of clubbing people into doing what they didn't want to do. The war is bringing great changes in racial relationships. The idea of a superior people, whether Germanic, Japanese, or Anglo-Saxon, will be pretty well exploded by the time this war is fought and won. Some of us will have a hard time to overcome our feeling of superiority. But if we will practice what we preach, and not do unto others what we don't want others to do unto us, a better relationship is bound to follow. But it cannot be achieved by the shotgun tactics some Negro groups seem to favor. Noisy methods, when persisted in by a minority group, only make a bad situation worse.

How Is Your ARP?

Ambassador Grew, just back from Japan, tells us that the Nips are the toughest of our several enemies and will be the hardest to lick. Maybe so. But the point that pricked was what our late envoy to Tokyo had to say about Japanese plans for invading and capturing the United States. The Japs hope to demoralize and disrupt communications on the invasion coast (presumably the Pacific Coast) by air attack and then land troops and finish the job. It all sounds far-fetched and fantastic, but let's not make the mistake of under-rating our enemy again. Remember Pearl Harbor and keep the watch fires burning. And we might add, be sure that your plant protective services are on their toes. Fire Prevention Week is all very well. It helps to make us fire conscious for a day or so. But in wartimes like these, with saboteurs on the loose and air raids imminent, we need to be plant-protection-conscious every week of the year. In that connection you will be interested in the Plant Protection Number of Dartnell's magazine CIVILIAN DEFENSE. You will find in it many practical suggestions and ideas for improving air-raid precaution measures. If you are not already a subscriber, let me know, and I will see that you get a copy of this issue. I think you will enjoy it.

The Bosses Pay

When President Roosevelt came out with the statement that salaries should be limited to $25,000 net, John B. Hawley, Jr., president of the Northern Pump Company, cut his salary from $448,000 before taxes to $25,000 after taxes. Just how much the actual cut was or how much of the salary cut came back in the form of increased company earnings, we do not know. But that it represented a sharp reduction, we have no doubt, and Mr. Hawley deserves only the highest praise for his patriotic action. But the theory that salaries of more than $25,000 are against the public interest is certainly debatable. If it were widely applied, it would strike a crippling blow at our whole system of private enterprise which is based on the principle of large rewards for those who have exceptional business ability. If men of ability and wide experience are to be branded unpatriotic if they work for a corporation at more than $25,000 net a year, then we may be sure such men will go into business for themselves. Managing their own business, instead of somebody else's business, presents a far more attractive picture. It would not be long before corporations would be unable to hire managers capable of successfully administering their properties, and the management of companies in which thousands of investors have put their savings would be turned over to second- and third-rate executives. The value of the securities of these corporations would quickly deteriorate, and billions of dollars would be lost. A ceiling on executive salaries is the best way in the world to assure post-war chaos.—*J. C. A.*

Scrap

It is our individual, patriotic duty to do everything we can to keep the war production lines moving—turning out a steady flow of ships, guns, planes, tanks and ammunition.

Every bit of critical material each of us can salvage and make available for re-processing helps to speed the day of overwhelming victory for the United Nations.

INTERNATIONAL BUSINESS MACHINES CORPORATION

Business Dares Washington to Match Its Will to Win

Working at forced draft, with new, untrained employees, minus needed tools and materials, business continues to chalk up new records and to meet every demand made upon it for its contribution to Victory. While Washington complains, business delivers the goods

BY EUGENE WHITMORE

MANY Army officers with ranks high enough to indicate authoritative information have stated that it requires eighteen men on the working front to maintain one soldier on the battle front. At times this figure of eighteen men has been put at seventeen men, sixteen men, and by some as low as fifteen men.

General Hershey talks of totals of ten million, eleven million, and once at least of a possible thirteen million men in the armed services. It requires just a simple job of multiplication to demonstrate how much of a manpower shortage impends in this country. Take the lowest figure now generally mentioned for total men under arms, ten million. Multiply this by the lowest figure generally used as the number of workers needed behind the lines to keep men in the battle fronts, which is fifteen. The answer to fifteen times ten million, as any schoolchild knows is 150,000,000. Which is considerably more than the total number of men, women and children in these United States.

But it makes little difference how we figure—cut the number of armed men in half, or reduce by one-half the number of men required to supply them and we still have a figure of 75,000,000 men needed in the war industry, plus whatever number remain for the armed services. It makes no difference whether we figure seven and one-half men per soldier, and ten million soldiers, or five million soldiers and fifteen men supplying them, the answer comes out 75,000,000 men.

It is probably true that not even the major generals know how many men are needed in civilian life and war industry to supply a soldier at the front, let alone all the brigadier generals who are rushing around the country speaking to gatherings of all kinds. But once again it makes no difference whether they know the actual figure or not, the fact remains that so many men will be drawn from usual pursuits in industry, business, retailing, wholesaling, banking, insurance, farming, transportation, and civilian manufacturing that previous manpower and personnel problems will seem like child's play compared to what faces us in the immediate future.

New Personnel Policies

There is but one policy available to the business which intends to continue operations. We must forget all old personnel requirements. We must go along with far fewer people; we must train girls, right out of high school; we must push young men, younger than we ever thought possible, into jobs of responsibility—at times heavier responsibility than we ever thought advisable. Think of the young men the Army trains to pilot planes costing up to a quarter million dollars. The department manager, asked to promote a young man to a higher position who says, "He ain't dry behind the ears," must learn to utilize these youngsters for a year or two at least until the Army or Navy gets them.

But that is not all. The personnel man of a Chicago drug chain threatened to buy a quantity of dolls for his soda fountain girls to play with during rest periods—they seemed that young to him. But they are doing the job.

At the other end of the scale business is hiring older people—older than ever before. Reports a sales manager: "Against my better

judgment I hired a salesman, age 65 last summer. He was once a well-known, popular executive salesman in our industry. In a few weeks he had rounded up all his old acquaintances and many of them seemed delighted to hand him some business. He is right up among the leading ten men in our organization. I have since hired two other men in their sixties, and could use half a dozen more."

Obviously not every job is suitable for a man in his sixties, nor is every man three score years of age suitable for active work. The point is, one man at sixty is a find —another man that age has slipped so badly to be of little value. But we must abolish all "rules" which set arbitrary age limits. Several big employers of office help are advertising in metropolitan papers for women who are "frankly forty." These employers have frowned on any beginners more than 25 years old for many years past.

Washington Grows Tough

The usually mild mannered, slow speaking assistant Secretary of the Navy, Ralph Bard, recently declared that we are "Losing the war, period," adding that we ought to damn well know it, too. Mr. Bard, whose speeches at ensign graduating exercises have been anything but inspiring, is just reflecting the general tendency in Washington to become tough, to resent civilian criticism, and to stop making concessions to civilian morale.

General Somervell recently took a pot shot at "soda fountain or drug store admirals," bitterly resenting the criticism aimed at the men who are conducting the war, and pointing out that we have to face the fact that so far the war has gone against us.

Donald Nelson whose critics have always been accused of being too soft and easy going declared only a few days before this was written that no more material is going to be devoted to maintaining civilian morale. Business men who think that current problems are all but insoluble must face this latest, tough, "get hard" attitude of the men who are running the war effort. They are convinced the country is ready to go on a belt-tightening regime, that the sooner we accept greater concentration on winning the war, the sooner war will end.

The present attitude in Washington may be summed up in Al Jolson's famous phrase, "You ain't seen nothing yet." That is putting it mildly. To business men accustomed to Washington mistakes, Washington threats, Washington forecasts, all this new hard-boiled attitude suddenly appearing may seem just another cry of "Wolf, wolf," and nothing else. Business remembers the forecasts of a sugar shortage; business remembers the prediction that automobile dealers would die like flies, as one government executive put it; and business remembers many, many speeches predicting dire shortages which never developed. Business remembers that high officials assured the country of ample steel production, which proved to be dead wrong; business remembers predictions of ample supplies of meat—one such prediction being made in mid-summer in a national magazine by the Secretary of Agriculture, and almost as soon as the ink was dry the meat shortage rose up to smack him in the face. With all these recollections of wrong-way guesses, predictions, forecasts, threats, business may be inclined not to believe the current crop of threats and forecasts. But it appears that the day of threats has passed and that we face many drastic moves —all designed to speed the day of Victory, but all presenting problems to business tougher than we have ever faced before.

Transportation Difficulties

The public reading in the daily press that it is no longer permissible to charter a private train or car for a trip to a race track or a football game was not inclined to get excited. Certainly, we can't expect these peacetime luxuries in wartime. But there is a lot more to the transportation problem than abolishing special trains; to save freight cars and motive power there may come a time shortly when national brands will take a licking, because we may not be able to ship products into a territory where similar products are also produced. This may mean that local brands will get a new lease on life. Recently in some markets many almost unknown brands of coffee have suddenly appeared on the market to be snapped up by purchasers who once turned thumbs down on these unknown brands. Local brands of other products may enjoy considerable sales booms as and if national brands are handicapped by shipping facilities.

It may be well for some national brand producers to consider two courses here: While shipping space is still available arrange to store merchandise in key cities or buy out local or regional producers whose plants can produce goods similar to those produced by the parent plant or plants.

The Steel Shortage

A swimming pool in a hotel is closed because no chemicals are available and a thousand other minor happenings occur because of one shortage or another. Each of these "minor" shutdowns are anything but minor to the man thus deprived of income, but viewed from the national standpoint of winning the war they are minor—so is the plight of the restaurant caught with no tea to serve, the hardware store with no nails to sell, or the laundry driver whose tires are worn past retreading.

All of these shortages and catastrophies pale into insignificance compared to the fact that the war program calls for far more steel than our steel mills can produce. At first it was thought that better scheduling would solve the steel problem; no one seemed to want more steel capacity except Henry

Kaiser. Then after "scheduling" came consumption cuts on civilian products, each cut bringing a delegation to Washington asking why the cut could not be made somewhere else. But today every effort, every project, even though it is a part of the war effort, must bow to the steel shortage and the demand for steel by the Army and Navy. Where no other explanation for abandoning some venture, depriving some industry of the right to operate is forthcoming, the probabilities are that steel shortages are the real reason.

Business Problems Multiply

In one sector after another of our national life we face lean, stripped-for-action economy. Meat rationing is all but here; gasoline rationing has been set for a definite date; travel is about to be rationed or reduced to a "ride for a vital purpose only" basis. Salaries above $5,000 are not to be raised, save for added responsibilities; earnings are to be put under a $25,000 ceiling, except for appeals. No matter what for the next tax bill finally becomes, it will all but squeeze the last ounce of profit out of many businesses. This means a necessity for an economy program that begins where other such programs have left off. It is no longer enough to adopt a pin-straightening policy. The time has passed when orders to conserve carbon paper, write on both sides of letterheads, use pencils down to a shorter stub can be considered true economy. These measures are commendable enough, but they do not go far enough. We must stop using pen-knives and begin using power shears to cut expenses. With the Government, the Army, Navy, and Marine Corps taking our best men in every category we are now faced with the necessity, in many cases, of operating business with second rate, overage, underage, or badly trained personnel. Some businesses can survive only by abolishing entire departments, and stripping the organization of all but absolutely productive people. It means consolidating departments, taking the best of what personnel remains, forgetting about many activities and skeletonizing others.

Here the point is to act quickly, to train in advance so far as possible, and to put down on a list the worst contingencies which can happen to a business. With this list before him an executive can plan alternatives, but if he waits too long the remedy comes after the patient is dead. As never before business needs a realistic approach. *(Continued on page 32)*

This silk banner is awarded to General Electric electronic tube sections showing the best weekly work improvement. One of a thousand similar ideas

Four Packard employees receive WPB awards for suggestions. Employees have cooperated enthusiastically with labor-management and suggestion committees

More and more the Government takes a hand in control of your inventory, and no matter how severe this control becomes this report from an electrical wholesaler shows how a basically sound inventory control makes it easy to comply with all new regulations almost as fast as Government issues them

BY
L. H. HOUCK

One girl keeps inventory controls posted on more than 7,000 items which are maintained in stock in Tampa, Jacksonville, Miami, and St. Petersburg stores

Inventory Control t

RED flags, orange slides, and green markers scattered through the inventory control system of the Raybro Electric Company, Tampa, Florida, are helping win the war. With merchandise control at a premium under complicated war conditions, each color and every little movement of a progressive signal is significant.

Priorities, freezing, and the thousand and one new details incident to wartime business operation made scarcely a ripple at Raybro as far as stock control was concerned. Few changes were necessary to convert its inventory control system to a war basis, mostly because more than fifteen years ago the management had started using progressive control signals and danger signs, and jamming control cards with important and fresh information.

"Our fifteen-year-old inventory control took the new government regulations requiring wholesalers to buy two-twelfths of their previous year's stocks and ran away with it," said Troy Brown, president of Raybro Electric Supplies, Inc., which is one of the largest electrical wholesalers in the South, with branch stocks and offices at Jacksonville, Miami, and St. Petersburg.

Government regulations require the wholesaler not to buy more than a sixty-day supply. Those with accurate inventory figures, turnover figures listed by the month, and low discrepancies between physical warehouse stocks and stocks on inventory control records have found it easy to comply with these requirements.

The only change needed at Raybro was a new order blank. This new form listed the number on hand, number on order, and turnover of the items ordered. These figures, it was found, could be taken directly from inventory cards because it is information that has been kept up-to-date for years.

Few firms have incorporated so many time- and money-saving features in their inventory control as Raybro, which has operated with and without progressive signals. For the past ten years, every automatic signal possible to make the control system an accurate record of large stocks of electrical appliances and contractor's supplies has been used as a control.

The more than 7,000 separate items are even "costed" directly on the cards, including overhead and freight charges. A repeat order showing a difference in freight charges would instantly be investigated for possible error.

Mr. Brown and Milton O. Hollis, secretary and assistant general manager, control not only the headquarters stock in Tampa but the stocks in the branches as well, through this card inventory system. They do the buying for the whole organization at Tampa, a feat which would be impossible without efficient stock control.

Raybro puts the inventory system to varied uses, such as moving out obsolete merchandise. When a manufacturer quits manufacturing an item, changes the model, or for any other reason an item is taken out of the regular line, it goes on the inventory card as obsolete, marked with a red flag. The whole organization then must push the red-flagged items at once. Many

Milton O. Hollis, assistant general manager, and Troy Brown, president, Raybro Electric Supplies, check the Kardex files for turnover and other information

tdit New Regulations

times stocks have been cleared before the manufacturer gets around to making a replacement item, with the result when the new, fresh, and improved article comes out, Raybro's decks are cleared and customers are waiting for it.

Sometimes an item won't push, and it is soon in competition with newer merchandise in the same stock. In these cases the card will give the history of the item from the time it was first stocked. The card will show the profit or loss on the item for the whole period and may indicate that drastic reductions are in order.

Physical inventories are taken twice each year—in June and December—and at these times each card is checked for slow-moving merchandise. No sales for six months is a death warrant for any article in stock.

One exception is Christmas merchandise which is checked on the inventory with the same month the year before. The card will naturally show inactivity all through the year except during the Christmas buying season.

The inventory control system in the headquarters at Tampa contains more than 7,000 items, with about the same amount in Jacksonville and with but little less in Miami and St. Petersburg. The system in Tampa is operated by one girl, whose only duty is to keep the file up-to-date. The inventory cards contain date order is placed, quantity, purchase order number, catalog number, sales order number, complete description of item, name and address of supplier, turnover, list price and net cost, freight and packaging data. Cards are kept for five years. The 7,000 items in the Tampa store are kept in 7 cabinets of 16 slides each, each cabinet containing 1,008 items.

Accurate daily posting of obsolete and discontinued items has resulted in important savings in office expense, such as letter writing and telephone tolls. Customers order from catalogs, manufacturer's advertising, and direct-mail circulars, some of which may be of old issue. War conditions make all things uncertain.

Manufacturers sometimes notify wholesalers by letter when the supply of an item is exhausted or discontinued, the letter becomes lost, or is used for awhile until inquiries stop, and then a retail customer orders. In some organizations at this period no one knows what the status of the merchandise is, so it is necessary to write letters or use long distance telephone, while the customer waits and perhaps fumes.

At Raybro all this information is on the card not far from the telephone, and a long distance telephone customer gets the information immediately.

A customer called long distance not long ago for a certain type of domestic ironer, sometimes called a mangle, giving model number and make. The inventory card showed instantly the model was not in stock, not on order, and had been discontinued by the manufacturer, but that a similar model, slightly different, had replaced it. All this information was given in less than three minutes, and the customer bought the similar model. The customer, who was the retailer, had something definite and authoritative to tell his customer, if she had bought the machine from some of the national advertising of the manufacturer.

Another use of the inventory control system is the checking of the shrinkage of warehouse stocks.

Discrepancies between stocks in the warehouse and stock on the control cards are ironed out immediately. Every sale made from Raybro stocks is recorded on control cards by order number. When physical inventories are taken twice each year, cards and stock must be balanced. Differences between the physical inventory and the cards show up immediately, and in virtually every case it is the stock count which is wrong and not the inventory cards, so the first thing is to recheck the merchandise. If this does not clear up the

shortage, all the orders on the cards are checked by their numbers, by which every item can be traced to the customer.

One time five $16 electric toasters couldn't be accounted for. A recheck of the physical stock failed to locate them, and after all other methods had failed, there was only one place the five toasters could possibly be.

Toasters are packed six in a box, and a box of six must have been sent to a customer who had ordered only one toaster. Checking the inventory cards they found a customer who had ordered a single toaster, so a letter was sent to him. He answered that he had ordered one and received six and had been wondering why Raybro didn't send him the single toaster or bill him for the extra five.

Such items in a stock of more than 7,000 items are like the proverbial needle in a haystack, and when it is possible to control to such fine points, it becomes apparent the system is a money-saver. To show how accurate the check between cards and merchandise is kept, the shortage at the last inventory was just one-half of 1 per cent.

Weekly lists of merchandise in stock are made up directly from the control cards for use by outside salesmen. This has been a godsend during these uncertain merchandising days. The salesman has only to consult his list to be able to inform his customer how many he has in what warehouse, and when the number is small, explains the stock is probably already sold. On these same lists the red-tagged merchandise is listed to receive first attention.

How Buick Standardizes Methods

WHAT is the proper procedure to follow when a small fire occurs? How shall it be reported and by whom and to whom? What is the proper method for keeping performance records of diamond dressing tools? What forms must be made out to have typewriters repaired? What is the company's policy for sampling and testing incoming materials? How are employees' work cards handled for non-productive labor? Who originates and follows through on loss or damage claims?

These are but a few of the questions fully answered in the *Standard Procedures Book* in use by ninety executives and department managers of the Buick Motors Division, General Motors Corporation. This division of General Motors operates a gigantic war production plant, built by the Defense Plant Corporation, near Chicago for the purpose of building—well you know what, or you guess what.

A Buick "Standard Procedure Sheet" is Mimeographed, 8½ by 11 inches, and carries on it fully prepared instructions for some procedure in the administration of the great operation. Because the organization occupies a new plant and is a new unit of General Motors, it was doubly essential that many necessary procedures be standardized. In many smaller plants and offices the knowledge which is written down, tabulated, and indexed in the Buick *Standard Procedures Book* is carried in the minds of different executives. Often many procedures are never standardized, never simplified, and never performed twice in exactly the same way where there is no written record. In the thousand and one jobs connected with operating a vast organization there are many jobs which would be easily bungled, forgotten, or delayed if there were no carefully developed method for handling them.

More than 150 procedures are described and outlined in the book. More are being written as fast as they can be prepared. To develop, classify, and standardize these procedures a special department was set up. At first, meetings were called to discuss each job with every executive whose department or work was involved. This seemed an unnecessarily protracted method for developing the procedure. Arguments followed arguments, and soon the business of preparing procedures threatened to develop into a debating society. But Buick had other, more important jobs. So it was decided to write a Standard Procedure Sheet covering a job, then send it to every executive concerned and ask for suggestions or approval. While some changes and discussions were and still are inevitable, the time required under this plan is considerably less than when each procedure sheet was discussed in detail in meetings.

Once a procedure is written up it becomes standard, and the work must be done according to the instructions until they are changed.

The sheets are punched for gathering in a loose-leaf ring binder, and about ninety binders have been furnished to executives and department managers for filing. Each procedure is numbered, indexed, and titled, and indexes by subjects and numbers make it easy to find any standard procedure.

Much confusion, many errors, much lost time, considerable duplication of effort are saved by use of this plan. With it anyone who needs to know can learn how 150 to 175 procedures are carried out. For example, *(Continued on page 32)*

(Wieting Photo)

Weeds in the Victory Garden

MEAT rationing in fifteen or twenty days, says one official of the War Production Board on the same day that other officials predict meat rationing is three to four months away.

Half the doctors will be called to the armed services, says one official as another points out that not nearly so many will be needed. While one sector of the Army complains about lack of officer material, a high-up general berates civilians for even wanting to become officers. Nine million men needed for the Army; 12,000,000 men needed for the Army; married men get ready to be drafted forthwith; married men need not worry until 1943. You may take your choice. There is an ample variety of advice, opinion, criticism, claim, and counter claim, all from equally high ranking officials—all from men who ought to have been trained to keep their mouths shut until they know whereof they speak.

There are two or three "offices" making conflicting statements about rubber, gasoline, and automobile conservation. We are told early in a given week that giant steel mills are on the verge of shutdowns for want of scrap, and in the same week officials of the biggest steel company say they are not worried about scrap. Women are told to wash tin cans, dry them so they will not rust. And they remain out in the rain to gather rust before they are picked up.

For almost everything we are told to do there is someone in equally high position to tell us that it is not the thing to do. Yet Washington claims the people are apathetic. They are not apathetic. But they are growing weary of all this conflicting harangue.

The man who planted the Victory garden shown above did it in a burst of patriotic fervor. But by midsummer, long before he harvested any vegetables it was choked with weeds. Those weeds are a symbol of the conflicting advice that pours out of Washington day after day. There will be weeds in more important places than neighborhood Victory gardens if higher-ups don't stop talking "too soon and too much."—*E. W.*

Letter Program fo

Ten ideas, all tried in actual practice, to help you get out the mail despite all shortages in office equipment and help

1. Learn to Write Short Letters

Any company whose correspondents learn to cut letters in half doubles the capacity of its stenographers. Cutting letters by 50 per cent is not impossible in many offices where correspondents and executives have fallen into bad letter writing habits. Short letters often get quicker attention than long letters and are frequently more effective. Have someone in authority look over carbons at least once a week, select the best short letters, and post them for examples of good letter writing. Issue occasional bulletins showing revisions of needlessly long letters.

2. Wasteful Dictating Habits

Where dictating machines are not used, many correspondents take up too much of the stenographer's time while dictating. A few minutes preparing to dictate will save much of her time. She isn't writing letters sitting at your desk waiting while you send to files for reference material. When letters need previous correspondence and call for special information before dictating, look up this material before you call a stenographer. Inaugurate an office rule not to interrupt correspondents while dictating. There is too much time wasted by stenographers waiting during interruptions. This rule is easy to enforce if it is made to apply to everybody in the office. Another point: Do not call stenographers for dictation several times daily. Wait until letters accumulate and dictate all the mail on your desk at one time.

3. Give "Stenos" a New Job

About half the average man's correspondence does not need dictation. It can be answered by brief notations on the correspondence. "Yes," "O. K.," "Thanks," are often the only clue needed by an intelligent stenographer to enable her to answer the letter completely. For example, a man writes for an appointment. Why dictate a letter telling him, "Your letter of September 29 asking for an appointment has been received and I shall be glad to have you call at my office on Tuesday morning, October 6. I anticipate the pleasure of meeting you." If you have a stenographer worthy of her profession, all you need do is pencil on the letter "October 6, a.m." She will write a letter somewhat as follows, "Mr. Wilson will be glad to see you Tuesday morning, October 6." And that's all there is to it. Give your stenographer a chance to make herself really useful.

4. Use More Form Letters

Business men in America went through a whole era of form letters. We had form letters and form paragraphs for everything. The idea was so overworked that form letters fell into disrepute. We went to the other extreme. Some companies formulated rules forbidding all manner of form letters and began insisting that high priced executives spend much time writing letters in answer to most routine correspondence. Analyze your mail for a few days, and you will see that from five to ten form letters will suffice to answer half your mail. Most business men receive about three times as many invitations to luncheons, dinners, meetings than they can attend. One form letter, "I am sorry that a previous engagement makes it impossible to accept your invitation" will answer most invitations. "Previous engagement" can be changed to "absence from the city" or anything else that fits. Similar letters will serve for many other standard cases occurring over and over again. A little thought, and you can prepare form letters which do not seem to be form letters.

5. "No Answer Required"

A friend sends you a clipping. He doesn't expect you to write him a personal letter thanking him for it. But you write three or four paragraphs to say, "Thank you." A company solicits your printing business, your insurance account, your coal order; a charity solicits a donation—being a good fellow, anxious not to offend anybody, you take time out to answer all these and hundreds of other letters each week. In many cases the old rule, "Silence is a polite negative," could apply. No one should quarrel with the peacetime habit of answering all letters received in a business office. But this is wartime. We may have to abandon some of the humanities. You simply cannot do justice to your extra burdens and your organization cannot carry on with its present size and lack of office equipment and continue these polite but no longer vital answers.

fo)verworked Offices

Every day the war continues brings the necessity to eliminate more and more old methods and find sound short-cuts

6. All Correspondence Answered Today

Many business men have been brought up to believe that it is some sort of high crime to go home at night with an unanswered letter on their desks. This idea has much merit and in peacetime is worth fostering. But it has been carried to extremes. The average correspondent will not know whether you answered a letter the day received or not. This passion for promptness in answering *all* mail leads to building an organization for peak days, such as Monday, leaving them half-busy on other days. In many cases it is not worth keeping people overtime just to carry out the "letters answered same day received" rule.

7. Conduct Letter Clinics

Appoint the best letter writer in the office as letter adviser. Have carbon copies come to his or her desk for suggestions and criticism when necessary. Such a person should not be too insistent on T-crossing or I-dotting, but should be able to reduce the length of most letters, improve the clarity of others, and eliminate bad letter writing habits throughout the organization. This same person should hold meetings occasionally to teach new employees how to write letters and assisting stenographers in handling correspondence without dictation. Some person should have authority to standardize physical appearance of correspondence. All types of correspondence should have a correct form, and this form should be adhered to by all departments. Many letter books show how to standardize correspondence.

8. Post the Week's Best Letters

Whoever has charge of the company letter clinic should select, at least once a week, a group of letters which are well nigh perfect and post them in correspondence departments and on bulletin boards for examples. Letters posted should be brief, friendly, should answer all points raised by the correspondence being answered. They should conform to all physical standards set up for office correspondence. All new form letters which concern more than one department should be displayed on bulletin boards with an explanation about use. If a form is one which can be used by several departments it should be duplicated and listed as a regular supply item. When unusually good incoming letters are received, post them also.

9. Be Brief but Not Curt

Short letters are not necessarily curt. Some of the friendliest letters on record are telegraphically brief. For example, here is a letter written in answer to an unnecessarily long letter asking for an appointment. The writer of the original letter was afraid the correspondent would not remember a previous visit several years ago, so reminded him of it at considerable length. Back came the answer, "Why, of course, I remember you and will be glad to see you. Come in any day next week." If more words would improve that letter, we cannot think of them. The letter tells all that is needed, is friendly, human but brief. Business men understand the need for brevity today. If they don't understand, they will have to learn. Most complaint letters do not call for apologies, excuses, beating around the bush. Only the facts, plus an "I'm sorry" are usually sufficient. Nearly all adjustment letters are too long.

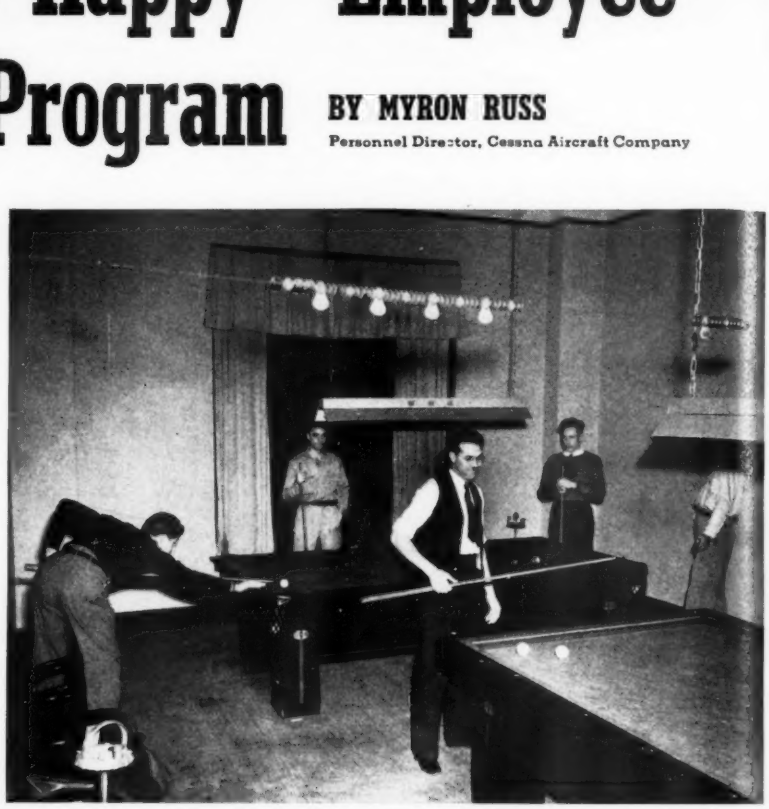
10. Inter-Office Communications

It is little less than criminal the way some executives write fellow executives and employees inter-office memoranda. This is the result of the "Put it in writing" or "Write, do not talk" craze which swept business a few years ago. Many a penciled memorandum, hasty "O.K.," or "Go Ahead" can replace a long inter-office memorandum. Too many dictated inter-office memoranda are no more than explanations, alibis, excuses, an unwillingness to take responsibility, a desire to shift burdens. Teach people to make their own decisions, to proceed, to go ahead, to carry on, without endless departmental or branch office correspondence. Where men in the same organization respect and trust each other, there is little need for making a written record of every conversation, every conference, every decision. Some branch managers spend almost all morning every day reading lengthy communications from the home office. Salesmen suffer the same difficulties. Of course, a reasonable amount of inter-office writing is inescapable. But it has been overdone in recent years. We can profitably suspend much of it for the duration.

"Keep 'Em Happy" Employee Relations Program

BY MYRON RUSS
Personnel Director, Cessna Aircraft Company

Cessna Aircraft, Wichita, with a vastly expanded payroll, in a boom town, finds the answer to some baffling personnel problems and here reports in detail some of the plans and methods which help keep personnel on an even keel, despite difficult local working conditions



The billiard room at the Cessna Club is always busy and employees are far better off here than if they were at a roadside grog shop or jitterbug joint

IF THERE is one day in the life of a Cessna worker more important, both to him and us, than any other day, it is his first day on the job. The key to a successful start, we feel, is a proper and thorough introduction to the job the new man is to do.

After he has filled out his application, been interviewed, and signed the papers incidental to employment, a member of the personnel department personally conducts him to the foreman and introduces him. Our foremen have been trained to realize the importance of this first contact with the employee. The foreman chats with him in a friendly manner about his past experience, introduces him to the department timekeeper, instructs him in the procedure of checking in and out of the department, and attempts to answer clearly any question the new worker has. He is then taken to the crew chief or lead man who explains his duties to him as simply as possible and gets him actually started on the job.

Our foremen are thoroughly familiar with the part their department plays in the complete production set-up and the relationship which one operation bears to another. The new employee soon learns the importance of his job and that his individual effort is recognized. A proper start on his job and an understanding of duties, we believe, are highly important in producing an efficient and cooperative worker.

If the new worker has joined the Cessna Employees Club at the time he fills out his employment papers (most of them do—the rates are only 50 cents a month), his use of its facilities will do much to hasten his assimilation into his new environment.

The Cessna Employees Club is a strictly social organization, and plays no part in labor activities. It was organized several years ago as a sickness insurance cooperative for the purpose of paying sick employees a portion of their weekly earnings while away from work and sending sickroom cheer in the form of flowers and cigarettes. Today, of these functions, the Cessna Employees Club retains only the practice of sending flowers to the sick or bereaved, while radios are also loaned to convalescents at no charge.

What makes the Cessna Employees Club so effective is the wide variety of its facilities. In downtown Wichita the club has leased two full floors in the A.O.U.W. Building. One floor is a social center. Here the employee off work may drop in for lunch at the snack bar, play billiards or pool, play cards in the reception room, and read or converse with his fellows in the spacious lounge. Probably

the greatest attraction is the large ballroom, which is fitted up in the manner of the modern night club. The club rooms are closed only from 3:00 a.m. to noon daily, and those are about the only hours that dancers and jitterbugs aren't cavorting on the dance floor. Music is provided by a giant juke box, except on Thursday nights when the second-shift orchestra swings it out for the boys and girls from 1:00 a.m. till closing time.

In use several times daily is the conference chamber of the club. In this room are held Red Cross meetings, foremen instruction groups, and various other gatherings.

Members of the Cessna Employees Club, their boy friends and girl friends, and their families are encouraged to make use of the club facilities at all times.

On the floor above the club rooms is the gymnasium, which is said to be the best equipped in the state of Kansas. The intra-plant basketball and soccer ball tournaments are held here. Practically every department has a team of some kind. Popular with both men and women alike are the ping-pong tables, shuffleboard, badminton, and tennis courts. The locker rooms are large, clean, and well arranged. The big steam bath located in the shower room is used a lot by those trying to shake off excess weight or get rid of a cold.

Lack of supervision or supervision of the wrong kind could completely obliterate the benefits of both the club rooms and the gymnasium. One of the first purposes of this extensive recreational program, club officers agree, is to give the Cessna man or woman an alternative to the beer joints, cheap dance halls, and shady amusement enterprises which mushroom around a thriving boom city. The club rooms are presided over by two hostesses, both former fraternity house mothers. Joy is unconfined, so long as it does not reach "gin mill" proportions. No beer or other intoxicants are served, and drinking on the premises is discouraged.

The gymnasium and all athletic activities of the Employees Club are under the direction of Vern L. Archer, for many years a coach at a Wichita high school and a competent instructor in many sports.

Completing the sports facilities is the Cessna Gun Club, located directly across from the plant offices. Originally started for the benefit of those employees interested in trap shooting, the gun club now provides a pistol range, and a rifle range is in the process of design. A dedicatory shoot was held in April to celebrate the opening of the new club house.

Two publications are supported and directed by the Employees Club. *Cessquire*, a twelve-page magazine, is distributed to workers every other Friday. Then there's *The Aircrafter*, which is made up in college yearbook style and published annually. It is lavishly illustrated with photographs of

The snack bar, another popular feature of the Cessna Employees Club, where all kinds of recreational facilities are available for monthly dues of only 50 cents

First day at work is the most difficult time for most employees. Friendly introductions all down the line of employees helps the newcomer feel at home

company executives, all employees by departments, candid snapshots, and factory scenes. The first issue, which came off the press in the fall of 1941, brought favorable notice, not only throughout the aircraft industry, but from business executives generally.

If an employee wants to be an actor, his dish is "Strictly Personnel," the half-hour radio show held every Sunday night under the Employees Club sponsorship. This is a combination of Major Bowes' Amateur Hour, "Information Please," and "We the People," providing a variety of outlets for the talent of Cessna employees, who are the sole performers on the show. Cessna Aircraft Company pays for the radio time for this program, but exercises no control whatever over its production. The morale-building power of "Strictly Personnel" has exceeded even the most optimistic expectations and has attracted national attention.

The more orthodox activities of the personnel department include the Employees Credit Union which is under the jurisdiction of the Kansas state banking system. This union arranges payroll deductions for savings accounts, extends loans up to $100 at a very low rate of interest, and is operated with a minimum of red tape. A very large proportion of the credit union funds are invested in War Bonds.

A liberal hospitalization and group insurance plan has also been established. With the company bearing a large portion of the premium cost, it is made easy for the employee to have life insurance and sick benefits in quantities which he might otherwise be unable to afford. In the event that an employee is ill for more than two days, he receives a call from Cessna's visiting nurse. She sees whether the employee needs additional medical attention and that everything is being done for his welfare and speedy recovery. Her calls continue daily, and in view of the fact that a large percentage of Cessna employees are single and from points outside of Wichita, this service is particularly appreciated by them.

Our educational program is an extensive one, designed to insure the maximum efficiency of employees, foremen, and supervisors. Talking pictures are extensively used, as are sound-slidefilms. Foremen and supervisors attend a lecture course in psychology given by W. H. Mikesell, head of the psychology department of Wichita University. These talks on human relations and, more specifically, industrial psychology, have been very successful and of great assistance in helping the supervisory staff to a better understanding of the problems and attitudes of their employees. In addition, weekly foremen conference meetings are held with the curriculum based on material furnished by the National Foremen's Institute. An interesting by-product of these meetings has been a closer bond of friendship and understanding among the foremen themselves, which has greatly lessened the bickering and petty politics often existing among department heads.

The feeding problem in a fast-moving industrial plant is always a formidable one. We felt that the cold lunch was really no suitable alternative to the dinner pail, so we finally evolved the "rolling restaurant" system, serving a choice of complete plate lunches at cost. The food is prepared in a large central kitchen, served on prewarmed plates, and loaded into electrically heated "Witamin Wagons" (described in more detail in the April 1942 issue of AMERICAN BUSINESS) which are wheeled to strategic locations throughout the plant. There, each wagon is again plugged into an electrical outlet where its temperature is maintained until serving is completed. Use of this system has made it possible to serve as many as 1,500 meals in five minutes, and the popularity of the "rolling restaurants" is attested by the fact that employees carrying lunch buckets are now rarely seen.

Are Employee Rating Plans the Bunk?

BY HERBERT MOORE
Business Research Corporation

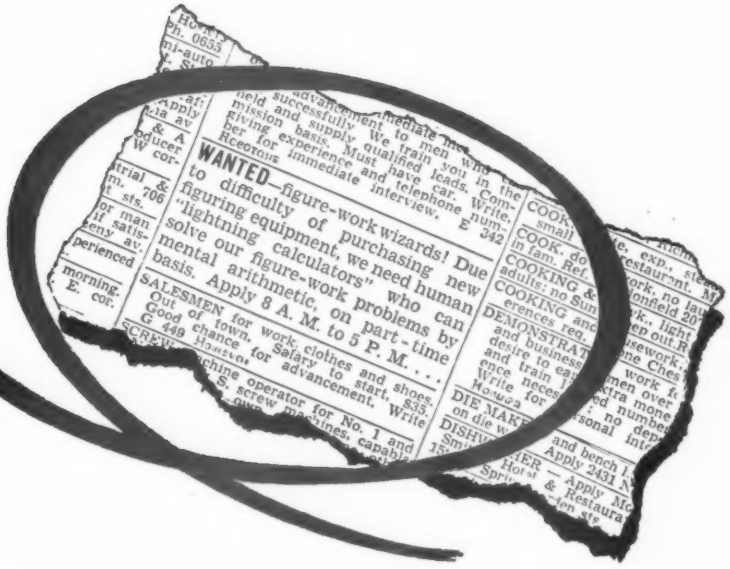
THE most frequently used method for rating employees is by means of the graphic rating scale. That appears in various forms and with different contents and is often refined by the addition of definitions for each step and by weighted values for each item.

In spite of these refinements the scale has not satisfactorily met the needs of personnel departments. Foremen complain because of the difficulty of understanding the terms; employees complain because of the fact that one error has been responsible for a low rating; and personnel managers complain because of the inconsistent judgments made by different raters. When the results from such ratings are compared with other measures of employees' value, there is frequent discrepancy rather than consistency.

Such criticism should indicate that the rating scale is deficient in either form, content, or assumptions. An examination of the assumptions of the graphic rating scale will indicate the causes of the difficulties:

FIRST, *it assumes that human qualities can be rated.* When comparing products of the same class or family, specialists are secured to make such qualitative judgments; no judgment made by a novice would be accepted as significant if one wanted an estimate of the relative *(Continued on page 26)*

CANCEL THIS AD!



You can rent Comptometer equipment!

You needn't hire wizards, or hunt up that abacus your missionary aunt brought back from China, in order to cope with increased figure work.

Even though you find it difficult or impossible to purchase new Comptometer adding-calculating machines, you may arrange to *rent* some Comptometer equipment from your local Comptometer Co. for short periods of time.

See your local Comptometer Co. representative — ask him to explain this important service. Or, if you prefer, write direct to Felt & Tarrant Mfg. Co., 1724 N. Paulina St., Chicago, Ill.

COMPTOMETER

REG. U. S. PAT. OFF.

ADDING-CALCULATING MACHINES AND METHODS

"... no extensions are made. Then the second and third copies are snapped out, sent immediately to the shipping department to expedite delivery of the order"

Customers' Invoices Now Mailed Day Earlier

Fast growing business modernizes invoicing methods to speed shipping, eliminate rewriting, prevent loss of orders, save labor, and complete billing without delay

BEN PEARSON COMPANY, Pine Bluff, Arkansas, began with Ben Pearson and three men making archery tackle—bows and arrows to you—in 1938. Mr. Pearson saw great future possibilities in archery as a national sport and felt that a real opportunity existed in the manufacture of all kinds of tackle and equipment for the sport. Obtaining outside capital he rented a brick building 80 by 125 feet, and because only a few of the standard woodworking machines were suitable, designed and built most of his own machines. By the end of 1939 business was increasing and fifty men were employed.

By the spring of 1940 the business was growing more rapidly and by mid-1940 80 men were employed, by the end of the year 100. Two buildings were rented in 1940 to provide additional space—one for storage, one for manufacturing targets. In the spring of 1941 the business doubled with 150 people working, some departments, sixteen hours a day. The employee roster was better than 270 by spring 1942, a force of traveling salesmen was employed, and distribution had been built among the best stores in the country.

Such a rapidly-growing business brought office troubles. A system which worked well in March became inadequate before the year ended. But one system which seems capable of taking care of one phase of the office operation, no matter how fast it grows, is the method of invoicing and making shipping orders, packing slips, labels, all at one writing. It is described by G. E. Powell, office manager, as follows:

"A seven-copy, snap-out form with one-time carbons does the job. The first or original copy is the customer's invoice. The second copy is the shipping copy; third copy is perforated and acts as both the label and packing slip, while posting is done from the fourth copy. The fifth copy is what is called the 'cash sale copy.' The sixth goes to the salesman on the road, and the seventh copy is filed according to state for later month-end sales analysis.

"In writing this form, the customer's order number, date received, date shipment is asked, method of shipment, the customer's name, terms of sale, and amount of discount, if a dealer, are typed at the top of the form. The articles are only listed in the first typing operation, together with prices, but no extensions are made. Then, the second and third copies are snapped out, sent immediately to the shipping department to expedite delivery of the order. The original and four copies remain intact. By not figuring extensions at first writing, the shipping and packing copies can be sent to the shipping department sooner.

"As soon as this is done clerks make extensions in pencil on the seventh copy, and when the shipping copy is returned to the office a different clerk makes extensions on it. This copy is then given to the invoice clerk who pulls the entire invoice form, which has not yet been separated, from its numerical folder, checks the extensions made by two different people, and if they match, types the quantity shipped, the extensions, and total on the original invoice or first copy.

"The forms are then separated, invoices mailed, and other copies distributed. Invoice numbers are typed on the form in the sequence which shipment was made, and in this way a numerical invoice file is made possible. A cross file of order numbers with the matching invoice number is prepared, so that check can be made at any time to see if a certain order number was shipped, and its invoice number.

"After the bookkeeper has finished with the fourth or posting copy, it is sent to another clerk who makes an analysis of the individual articles sold and then places the invoices in a numerical file. When the customer's invoice is completed, the shipping order is then filed alphabetically, which results in a copy of the invoice being filed alphabetically.

"The fifth, or cash sale copy, saves considerable time in posting. It is used for various customers who buy irregularly, for whom it is deemed unnecessary to open a ledger account. This copy is placed in an alphabetical file to take the place of machine posting, and as cash receipts are posted, if the amount received equals the invoice, the copy is removed from the file, which results, in effect, in posting a credit to the ledger account. If small debits or credits remain, the copies are kept in the file until cleared up.

"Additional quantities of single sheets which can be inserted in the form for customers requesting duplicate copies of invoices are kept on hand, thus making it possible to prepare the extra copy with no extra typing.

"Each day a sales report is made, showing the amount of orders received, amount of shipments made, and the amount of credit memorandums prepared.

"This system, which makes certain copies serve more than one purpose and prepares invoice, shipping order, packing slip, and other copies in one writing, saves us considerable labor expense and makes possible the mailing of customers' invoices one day sooner."

Business executives worried about the shortage of office machines will be reassured when studying these pictures. All three show repair and renewal facilities maintained by well-known office machine makers. Top picture is one of the shops maintained by International Business Machines. Middle picture is one of many field service departments maintained by Burroughs Adding Machine Company, and bottom picture is one of Remington Rand's shops

OFFICE *Management in War*

One idea described here brought savings of many thousands of dollars to the company which first used it. Here it is passed along for adaptation to other businesses. That is the spirit of American Business readers—share the "know how" with others

THE T. W. Garner Food Company, Winston-Salem, North Carolina, produces and sells a line of table condiments consisting of twenty-seven items. All these items, with packing descriptions, are printed on the face of the order to save time writing up the order. A four-part order form is used. On the back of two of the copies which are left with the customer there is an order form, headed, "Use this side for ordering by mail," followed by an order blank made out to the company, which can be quickly filled in by the customer. The same list of twenty-seven items is repeated on the form so that the customer need only check the items needed, sign, and mail to the company or to the salesman. Thomas W. Richards, *Baltimore Salesbook Company.*

USE THIS SIDE FOR ORDERING BY MAIL

T. W. GARNER FOOD COMPANY
715-17-19 OAK STREET
WINSTON-SALEM, N. C.

Please send us the following:

_____ 194__

Ship to _____

At _____

QUAN	DESCRIPTION	PRICE	AMOUNT
	12/9½ oz. Garners Barbecue Sauce		
	24/7 oz. Garners Barbecue Sauce		
	24/3½ oz. Garners Barbecue Sauce		
	4/1 gal. Garners Barbecue Sauce		
	12/5 oz. Garners Worcestershire Sauce		
	4/1 gal. Garners Worcestershire Sauce		
	24/3 oz. Garners Texan Pete Hot Sauce		
	24/6½ oz. Garners Texan Pete Hot Sauce		
	24/7 oz. Garners Steak Sauce		
	12/9½ oz. Garners Cocktail Seafood Sauce		
	24/7 oz. Garners Pepper Sauce		
	24/3 oz. Garners Pepper Sauce		
	12/14 oz. Garners Chili Sauce		
	24/6 oz. Garners Soy Sauce		
	12/8 oz. Garners Tartar Sauce		
	24/8½ oz. Garners Hot Dog Sauce		
	24/6 oz. Garners Pure Horseradish		
	12/1 qt. Garners Pure Horseradish		
	24/12 oz. Garners Pancake Syrup		
	24/10 oz. Garners Pickle Relish		
	4/1 gal. Garners Pickle Relish		
	48/10½ oz. Garners Can Chili		
	48/7 oz. Garners Can Chili		
	Garners Prepared Mustard		
	Garners Distilled Vinegar		
	Garners Pickles		
	Garners Spices		

Buyer _____

MFD. BY THE BALTIMORE SALESBOOK CO., BALTIMORE, MD.

This is the back of the customer's copy of the order used for re-orders

★

One office manager who constantly nagged the entire office personnel about tardiness and frequently posted bulletins, or sent around bulletins to be read and initialed, made an analysis and found that more than 70 per cent of the tardiness was concentrated in three out of about fifteen departments. He realized that his efforts were being wasted and that he was shooting at the entire office when only a couple of departments were really bad. He stopped criticizing and posting bulletins, sent home three employees from one of the worst departments, announcing that late comers hereafter would be sent home and docked for the day. There was somewhat of a storm at first, which was just what he wanted, because it gave him a chance to explain that the rule would affect only a few people, because comparatively few people were responsible for the bad record. After a few days of grumbling the delinquent departments showed a splendid improvement and the problem was solved.

★

Shortage of equipment was solved in one office by hiring and training a night crew in the office. Working hours were changed for the day crew from 8:30 a.m. to 5:00 p.m. so that work now begins at 7:30 a.m. and continues to 4:30 p.m. The night crew comes on at 4:30 p.m. and works until 12:30 a.m. This is impossible in those states where laws exist prohibiting women working after 10 p.m., but in states where no such laws are in effect, the plan is a good one to double the use of present office machines. Some companies are known to pay a 5 per cent premium for night work.

★

Expansion in one office called for more desks. They were not available quickly. Check of the work of various people showed that tables were suitable in many cases and that desks were not really needed. Tables were available and were bought, the desks transferred to people who needed them, and others put to work at tables. Use of tables which were smaller than desks permitted more people to work in the same space. Grumbling was heard at first, but workers soon became accustomed to tables.

★

Best description of an order is one devised many years ago by L. C. Walker, president and one of the founders of Shaw-Walker Company. He describes an order as a piece of paper covered with gold—"profit." Every person who touches that order rubs off some of the gold—profit. If enough people touch that order between the time it is received, credit looked up, recorded, copied, filled, packed, shipped, invoiced, posted, and then

finally collected, all the gold is rubbed off, and nothing remains as profit for the company which received it. Keep this in mind when anyone suggests adding a routine, a step, or another handling for your orders. Remember—the "gold" rubs off easily.

★

Now is the time when most electric fans are put away for the winter. Wrap up fans carefully, store them properly, and see that a tag is securely attached to every fan giving its location or the name of the person or department from which it was taken before going to storage. This will save delay as well as argument on the first hot day of 1943.

★

In offices where Christmas cards, packages, remembrances, gifts are being sent to former employees now overseas, October is the mailing deadline. Address the packages as usual, mark them "Christmas" and the Post Office Department will see to delivery at the proper time. For men serving in the continental United States, allow a few more days' leeway than usual. Mails are heavy and Army and Navy mail handling may be slightly delayed.

★

With turnover rates increasing rapidly and many offices experiencing shortage of workers who leave without giving customary notice, one office manager has a list of former employees—usually married women—who have agreed to come in a few days at a time to fill in for absent workers. As the cost of living increases there are more and more married women who are not averse to working a few days, a week or two weeks occasionally, to bolster up the family funds. Recently in one office three girls failed to report for work after vacations. The office manager drew on his list of temporary workers and filled all three positions with former employees who were at least reasonably familiar with the

CITATION

To The Office Workers Of America . . .

As contributors to the war effort, they merit your praise and recognition.

Consider what our country has gained through the spirit and ability of these men and women.

No other country has produced office workers of such alertness, ambition and progressiveness.

Nowhere else have such workers been so willing to improve their methods, so consistently eager to replace the old and slow with the new and quick.

This has resulted in the creation of a huge office machinery industry of which Underwood Elliott Fisher is proud to be a part.

Because this industry exists, our Army and Navy possess a supply of typewriters and other office machines unmatched by any of the enemy.

Because this industry exists, our country possesses a group of manufacturing plants—*built* to supply the world's greatest needs for office machines—*now turning out* large quantities of important war materials.

Day after day we read of deserved awards to *factory* workers . . . here is our tribute to America's *office* workers.

And here is our promise to those workers, several million of them our valued customers.

No matter what the difficulties, our maintenance service will continue undiminished from coast to coast.

We shall continue to provide spare parts . . . as well as a complete line of carbon paper and ribbons unsurpassed in quality, for every make of office machine.

And we shall continue to devise and suggest methods for *conserving* their typewriters, adding and accounting machines and for *operating* these machines with greater efficiency.

Underwood Elliott Fisher

HELPS SPEED THE NATION'S VICTORY

Underwood Elliott Fisher Company, One Park Ave., New York, N. Y.

Accounting Plan Brings Better Use of Trucks

SEVERAL large baking companies have developed a plan which enables them to save so much of the driver-salesman's time that the same truck can service twice as many customers.

As usually operated, a baking truck is loaded with rolls, cakes, buns, and other products each morning, the goods charged to the salesman who must bring back charges, cash, or returned goods to balance. As the driver-salesman calls on each customer he must enter the store, determine what is wanted, return to the truck, pack the goods, make out a sales slip, then deliver and get a receipt for the delivery or the cash.

Analysis of sales showed that most customers bought the same on the same days of the week. Thus each Monday order from a given customer was almost always the same as the previous Monday. Saturday's order, while totally different from Friday's order, was usually similar to the previous Saturday order.

This being true, it then became possible to make agreements with most customers for standing orders, one for each day of the week—so much for Monday, so much for Tuesday, and so on through the week. With these standing orders agreed upon, the office prepares the orders, heads them up with an Addressograph plate which carries, in addition to the name and address and terms upon which each customer is sold, a list of the goods and the total amount of the bill. This gives a completed bill, including the total in one rapid operation. These are run on one-time carbon Handyset bills. Then the Addressograph plates are run through again to imprint the customers' names on bags, in which the orders are filled.

Operating in this way the driver-salesman makes but one trip into the store with the goods already prepared, losing no time writing the sales slip as his truck stands waiting. If the customer wants to add something to his order, the salesman fills it from a reserve stock in his truck, adds the amount to the bill. One copy remains at the office at all times. Two copies go out with the shipment with one-time carbons still inserted. If the delivery is a c.o.d., one copy is left with the customer, the other returning to the office. If it is a charge account, both copies are returned to the office. When the weekly bill is made out, one copy is attached to the statement.

For customers whose needs are more flexible, the bakery has arrangements to take the orders over the telephone each night for delivery the following morning. In this case the bills are prepared on a billing machine, using the same one-time carbon sets. The plan eliminates errors, doubles the effectiveness of trucks, and enables the bakers to gauge production more accurately as each day's needs are known in advance.

This plan, it seems, could be adapted to many other companies whose products are sold and delivered from trucks. The standard order, placed in advance has many money saving features, especially valuable in times when labor is scarce and tires scarcer.

routine and who filled in admirably until permanent employees were hired to do the work.

★

If you have a company cafeteria consider serving simple breakfasts there. One company which tried it did so because people came to work, then sneaked out for breakfast or a second cup of coffee. Serving breakfast in the office lunch room or cafeteria reduced tardiness, all but ended mid-morning fatigue, the habit of going out for coffee in mid-morning, and put an end to those "sneak breakfasts," so common in thousands of offices. Only about one-fourth the staff is needed for serving breakfast, as compared with lunch.

★

Secondary skills, frequently not mentioned by employees when applying for positions, may prove to be a "life saver" to harassed office managers if they only knew who possessed these secondary skills. A number of office executives have been conducting censuses of secondary skill, asking each employee to list any jobs other than the one currently held which he or she is capable of filling. In almost every case there was a surprising number of secondary skills possessed by employees of the office. Many companies set up special Findex or Kardex or Keysort records so that it is always easy to find names of workers who have listed secondary skills.

★

One subscriber reports reverting to a plan not in use since the hectic 1917-18 World War days. He now pays $1.00 for every new employee brought in or introduced by a present worker. The dollar is paid as soon as the new employee is approved by the employment manager. If the new employee stays thirty days, another dollar goes to the sponsor. Once this company frowned on employing relatives. Today the introduction of relatives is encouraged.

A well-known manufacturer needs more accounting help. To create a supply he encourages present clerical employees to enroll in an extension course in accountancy. The company pays the tuition in advance, then deducts the cost from the employee's salary in weekly instalments. If and when the employee completes the course and is awarded a diploma of graduation, half the tuition is refunded. For employees who drop by the wayside and do not finish there are no refunds.

★

Here's another idea for anticipating the need for typists and stenographers in the future. One company employs girls with high school education or better for mailing room work, such as folding, stuffing, sealing envelopes, operating Postage Meters, folding machines, addressing machines, etc. These girls are given a brief instruction period daily and permitted to practice on typewriters the final hour of each day. The plan has not been in use long enough to say that it is a success, but the company considers it worth continuing.

★

A Milwaukee company employing many office workers does not raise salaries because of changes in cost of living, but gives an increased or decreased bonus every time the cost of living index changes three points.

★

Here is a habit, perhaps permissible in ordinary times but not worth while today. Many stenographers make an extra copy of all letters just to save going to the files, or in fear filing department will lose letters. If your filing department is good put an end to this practice. It takes extra time, uses carbons and copy sheets, clutters up space. Almost every stenographer has certain little habits, such as this one, which could well be dispensed with today.

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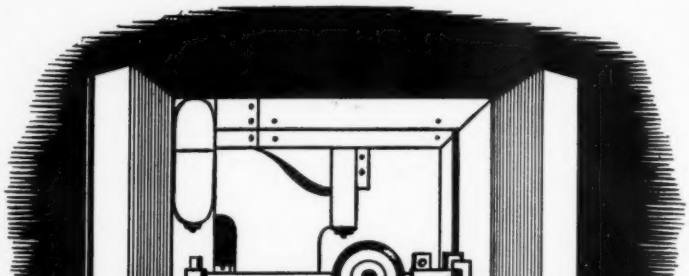

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THE DARTNELL CORPORATION, 4660 RAVENSWOOD AVENUE, CHICAGO

Are Employee Rating Plans the Bunk?

(Continued from page 18)

merits of two motors, two suits of clothes, or two pairs of shoes. However, in the field of human behavior, men who have had limited experience in directing the work of others are asked to pass judgments on those they observe.

SECOND, *it assumes that qualities are real and isolable factors.* Most rating scales call for a judgment on an employee's dependability, initiative, and cooperation; some scales provide definitions of these terms. In either case the assumption is made that the employee possesses the quality in some degree and that the quality represents modes of activity. But, all that foremen can observe is a type of activity; the interpretation of that activity into a qualitative factor that supposedly was responsible for it is only an inference. Reliable inferences are based on wide collections of facts; the classes into which such facts fall are merely convenient calling cards. To name the card first and to insist that the fact fit the card-title places the cart before the horse.

THIRD, *it assumes that qualities convey the same meaning to all raters.* To assure uniformity of interpretation, many scales contain step definitions and call for a check of those graded steps that characterize the employee. In spite of the specific nature of such definitions, the rater is still obliged to interpret them and will ascribe his peculiar meaning to the general term. Originality and initiative vary with different raters; to one rater originality is only evidenced when a new instrument is constructed, while to another it is present whenever anything unusual is said or done. To one rater initiative is apparent only when

an employee plans or operates a new movement, while to another it is equivalent to work that is done without supervision. Conflicting interpretations characterize all such terms.

These three difficulties are insurmountable; in spite of attempts made during the past twenty-five years we have not agreed on the qualities that should be rated or the meanings of the terms that are used. This would seem to indicate the futility of attempts at rating qualities, and to suggest that ratings would be more successful when they are limited to records of behavior, and when interpretations of these records are relegated to the limbo of forgotten events.

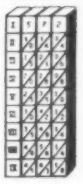
Acting on the assumption that rating scales should be systematized records of behavior rather than interpretations of such records, a new type of rating scale has been developed; it might well be called the "Frequency Rating Scale"; in it an attempt is made to answer the question, "How often?" and graded replies are in terms of "always," "frequently," "occasionally," "very rarely," and "never." Included in such a scale are such questions as:

Does he get confused in a new situation?	A F O R N
His assignments are done on schedule	A F O R N
He misses details on exacting work	A F O R N

The scale has not been in use for a sufficiently long period of time to appraise its consistency; the preliminary work indicates that foremen take to it more kindly than they do to the graphic scale, and the personnel managers find the responses much more significant during the interview.

If a number of personnel men will begin to use a scale such as this, it will soon be possible to determine whether or not it is a real and important improvement on the usual type of rating scale where so much is left to opinion, and where opinions are likely to differ so widely among the men who use them.

Landmarks of business progress



IN 1614 John Napier, Scottish nobleman, devised the first mechanical means of calculation... a system of numbered rods, called "Napier's Bones", permitting the solution of multiplication by addition.

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Among modern calculators Marchant sets new standards of speed and accuracy with

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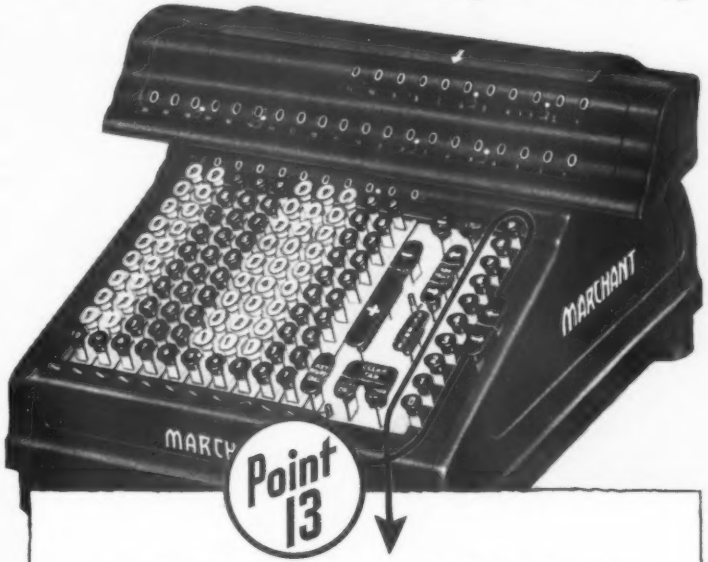

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The secret? Marchant's Automatic "Simultaneous" Multiplication ... called "simultaneous" because the answer is formed *during the time* the multiplier is being entered and *not afterward.*

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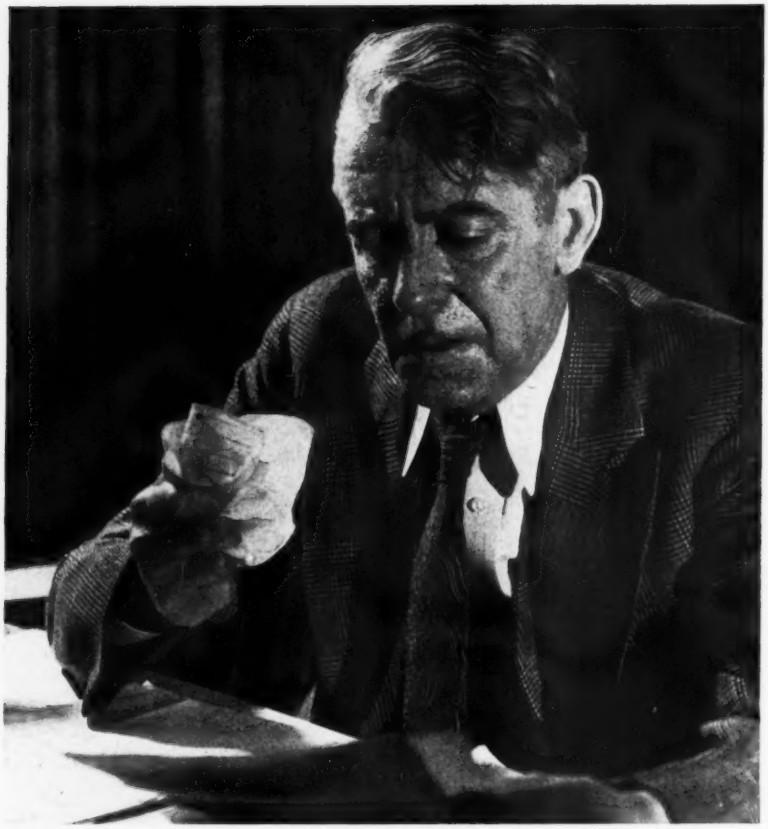


Whether at desk or machine the worker with a cold is a menace to himself and to fellow workers. He may start an epidemic, or become seriously ill. In either case, he is a costly expense to business. So now business is trying to help him

Colds on the Payroll

Of all the time lost in production 90 per cent is due to illness, not accidents—35 per cent is due to common colds alone. Proper nutrition helps insure fewer and shorter illnesses. Here is the first of three reports on steps industry is taking to insure better nutrition

CHICAGO experienced an unusually cold spell during the week of September 21, 1942. On Monday morning of that week workers in a certain big plant began coming to the office of the nurse, asking, "When are you going to start giving us vitamins?"

The nurse explained that vitamins would be distributed beginning Wednesday, September 23. This was good news to these workers because they have had the advantages of regular distribution of vitamin tablets for three previous years and are convinced that vitamins reduce the chances of contracting colds.

Of course, everyone who has studied the subject knows that vitamins will not *prevent* colds, but these workers are convinced that they have less colds and that the vitamins make it easier to throw off colds once they are contracted.

These workers, employees of the Galvin Manufacturing Company, widely-known maker of Motorola radio receivers, are enthusiastic about the vitamin program. For three years now the company has supplied a poly-vitamin tablet containing vitamins A, B, D, and G. The nurse who administers the tablets explains carefully that the tablets contain no vitamin C and that workers should be careful to eat foods which will provide sufficient quantities of C in their diet. To include C vitamins in the tablets would just about double the costs for the company, and it was decided that the extra cost was not warranted by the probable results achieved from including it in the ration distributed.

This company has found three factors important in distributing vitamins to workers: (1) Psychological, (2) good-will, and (3) medical. Taking vitamin tablets regularly makes a worker think he feels better, and thinking he feels better, he probably is better. Receiving vitamins regularly with no expense to himself, the worker feels that the company is taking a genuine interest in his welfare and is inclined to feel more kindly toward the company. Medically, there are advantages also. We know that some workers, because of faulty food preparation at home, because of bad eating habits and improperly balanced meals, suffer certain vitamin deficiencies. This does not mean the worker eats too little or that he is unable to obtain good food. He has never been educated, nor has his wife been educated, to prepare food properly. Too often, most of the precious vitamins in his vegetables are poured down the sink when the good wife drains off the pot liquor in which his vegetables have been cooked. Or, he doesn't like vegetables, will not eat

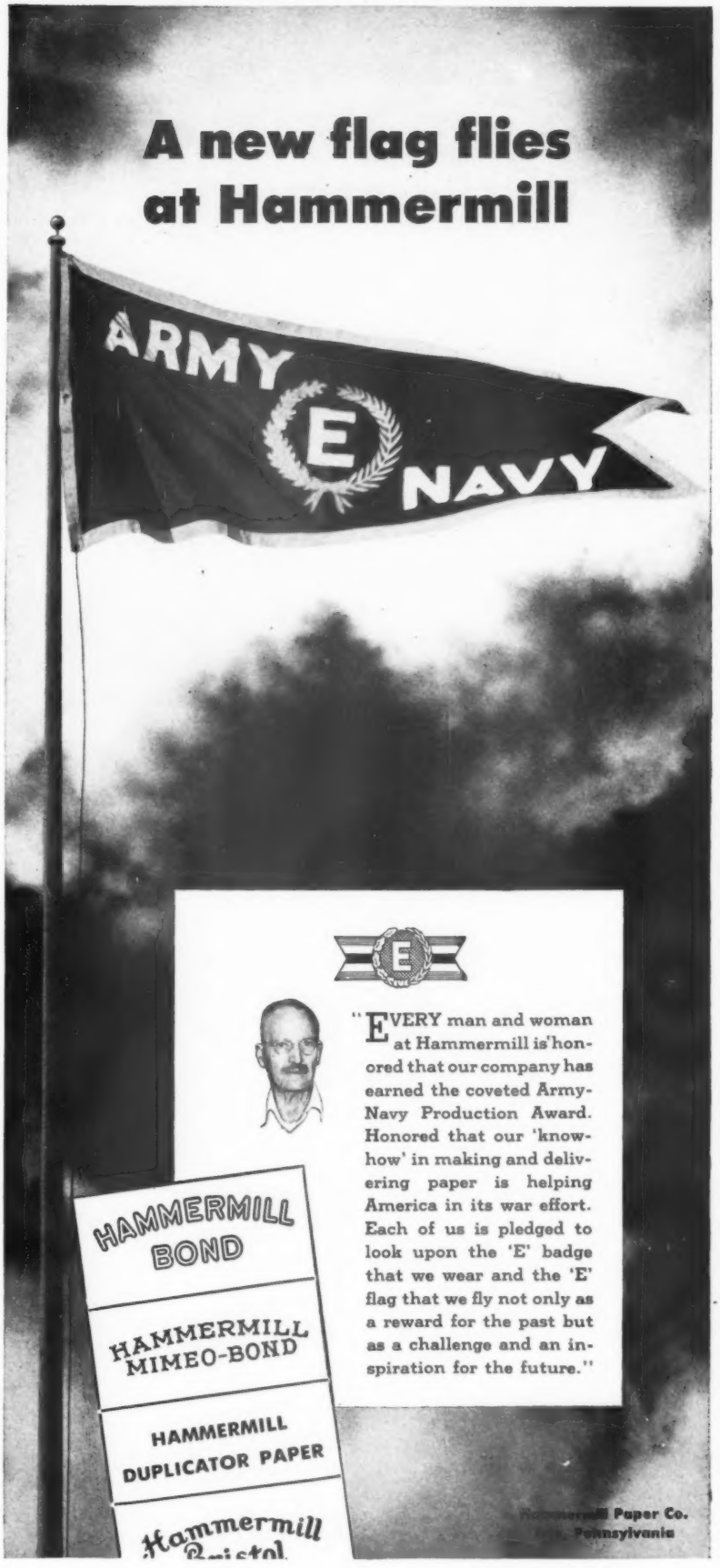
them, and subsists on a meat and potato diet, plus quantities of sweets which may fatten him but leave a marked vitamin deficiency.

Vitamin tablets are distributed to Galvin employees each year from October to April, the exact date of beginning and ending depending upon the prevailing weather and temperatures each fall and spring. Absenteeism at Galvin's seldom reaches 2 per cent and almost never exceeds this figure. Distribution of vitamins does not prevent colds, and we should not use colds as a yardstick in judging the value of vitamin distribution for workers. Nevertheless, it is believed that Galvin employees have fewer colds than the average, that the colds are of shorter duration, and are less likely to be accompanied by high temperatures which would prevent them from appearing at work.

It has been explained over and over again by scientific experimenters that it is all but impossible to find conditions in industrial life which enable the experimenter to conduct a truly scientific experiment. Scientists are extremely reluctant to announce any conclusions unless and until they are certain that experiments were conducted under controlled conditions, that a large enough group was involved, and that the observations were carefully made by experienced workers. But there have been tests which approach scientific accuracy, which seem to verify the conclusions reached by the workers at Galvin Manufacturing Company.

One such test was conducted by Howard W. Haggard, M.D., of the Laboratory of Applied Physiology, Yale University. Dr. Haggard worked with two groups of men in industry, about 500 in each group. They were comparable in age and did essentially the same work under essentially the same conditions. It was impossible to obtain individual records, but group records were carefully maintained during the experiment.

One group of 500 men was given a vitamin and mineral supplement to diet selected by the management



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Vitamin deficiencies affect three of every four employees in *your* plant, according to government authorities. The *only* way to overcome them is to provide a *sufficiency* of vitamins.

Vitamins increase vitality, improve sleep, reduce nervousness, irritability and fatigue due to vitamin lack, and provide an intangible spark which fires employees to increased effort.

VitaMight concentrated food capsules supply SIXTEEN all-important vitamins and minerals. They are used by employees of scores of both large and small plants throughout the country. Among them are Du Pont, Illinois Central System, Burlington, Pure Oil Company, Utah Radio, National Safety Council, Valier Coal Mines, Aetna Ball Bearing, etc.

It takes time, knowledge and much effort to serve properly balanced meals *all* the time in the home. It takes only an instant daily to swallow small *VitaMight* capsules which assure the full minimum vitamin requirements set by both the U.S. government and the American Medical Association.

We are the pioneer and largest company *specializing* in vitamins for industry, providing high potency formulae at a price about ⅓ of retail.

An inquiry will bring you complete and authoritative information, including results of a national survey of what employees eat—or don't eat; a chart showing how the proved *VitaMight* plan for industry *pays for itself 3 to 14 times over,* and actual plans now in operation.

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of the company which employed both groups. This supplement consisted of

8,000 units of vitamin A
500 units of vitamin B-1
1,750 micrograms of vitamin G
100 micrograms of vitamin B-6
500 units of vitamin C
800 units of vitamin D
10 milligrams of nicotinamide
10 milligrams of vitamin E
1 gram of yeast concentrate
1 gram of wheat germ powder
400 milligrams of rice polishings
13 grams of dry, defatted milk powder

The supplement was individually distributed daily to see that the 500 men in the experimental group took the preparation.

Production records, spoilage records, and attendance records were kept for November and December, prior to the experimental period. The administration of the diet supplement occurred in January and February, following. These two months usually bring greater absenteeism than December and November. The year of the experiment was no exception. But the increase in absenteeism among the men not receiving supplements was approximately ten times as great as among those who received the supplements.

Spoilage records were equally interesting. An arbitrary unit was used to measure daily spoilage. In such units for the two-month pre-experimental period, the average spoilage in the control group was 73 per day. In the experimental group the average was 78 per day. In the two months following, the control group averaged a spoilage of 68 per day, while the experimental group which received the vitamins had an average spoilage of 44 per day, a decrease of 43.6 per cent, as compared with a decrease of 6.8 per cent in the group which took no vitamins.

Dr. Haggard, with typical scientific conservatism, reports that the "psychological incentive to greater effort is always an important consideration and often much experimental data, when favorable, is perhaps wisely discounted on this basis." Nevertheless, he adds, "Spoilage is much less likely to be affected by such influences than is overall production."

In considering production it was necessary to take into the calculations the increase in production which was due to the decrease in absenteeism. Obviously, if a larger number of the experimental group of 500 were present for work, the greater the production should increase. Because of this, production was broken down on a per-man day basis, and again broken down into weekly increments. The reason for this breakdown was to allow for an anticipated psychological effect. For the control group during the pre-experimental period, production was (on an arbitrary standard) 8.08 and for the experimental group, 9.37. During the experimental period the change was an increase of 5.9 per cent for the control group and an increase of 7.9 per cent for the experimental group. The weekly breakdown was more significant. The control group showed small fluctuations from week to week, the maximum variation being from 8.27 to 9.41. In contrast, the experimental group (which was given the supplement to diet) showed in the first week an exceptional rise to 11.83. During the second week, production fell to 8.51. Thereafter a significant change occurred. The control group's production fluctuated at random, while the experimental group rose steadily week by week, until at the end of the two-month period it reached and exceeded the high figure of the first week. If the men benefited from the supplements, it would be exactly this sort of slow, progressive improvement which would be anticipated. Such gradually increasing production would not be expected from psychological influences.

This tends, according to Dr. Haggard, to indicate or at least suggest that the supplements were beneficial. This view was partially corroborated by answers to questionnaires given to the men. Forty-eight per cent stated they slept better during the two months

while supplements were administered than in the pre-experimental period, an equal number noted no change, and 4 per cent claimed to have slept less. As to appetite, 43 per cent thought they noted better appetites, and 47 per cent reported no change. At the end of the first month of the experiment, 37 per cent of the men said they felt less fatigued after work, and at the end of the second month 71 per cent gave this answer.

Some indication as to what workers think of vitamins was seen in the request of the United Electrical Radio and Machine Workers Union for a clause in its contract with the Empire Ordnance Corporation binding the company to furnish two vitamin tablets daily for each worker covered by the contract. The corporation agreed, although the agreement was not made a part of the written contract. One union leader claims that in future contracts this clause may be customary. Whether the union should expect the employer to furnish the vitamins or not is beside the point; the point is, many workers have begun to believe that vitamins reduce fatigue, lessen the liability to colds, and make for better health.

Dr. Henry Borsook, of the California Institute of Technology, calls attention to a finding of the United States Department of Agriculture which reveals that in four regions of the country from coast to coast among employed non-relief workers poor diets were prevalent, specifically as follows: Poor, 50 per cent; fair, 35 per cent; and good, only 15 per cent. The chief difference between good, fair, and poor diets is the varying amounts of vitamins and minerals they contain. Dr. Borsook has made studies among the aircraft workers in Southern California which indicate that about half the workers suffer from vitamin deficiency, principally due to badly balanced diets and hurried meals.

Attempts to control the prevalence of colds by means other than vitamin treatments are well known. One plant urges workers to spend a certain amount of their own time under sun lamps provided by the company; another company maintains a drying room where girls, arriving at work on rainy days, may dry their clothing, using dry slippers furnished by the management while their own shoes dry. Many plants attempt to encourage workers to drink large quantities of fruit juices sold from snack wagons and well distributed soft drink facilities.

But the common cold continues to baffle science. So-called "cold shots" are often too expensive for most workers. Nor have they proved effective. Despite everything industry and business has tried, workers continue to turn up with colds. But almost everything which has been tried brings some helpful result. When we consider the loss to industry which runs into fantastically high figures each year, it seems that any steps which hold any hope of alleviating colds, either by helping people develop healthy bodies which tend to resist cold infections or by helping them throw off colds sooner than usual, is a good investment.

Many factors influence the incidence of colds among workers. Nutrition, exercise, sleep, regular habits, fatigue—all these and more are factors to be considered. In forthcoming issues we will discuss other means of building up worker health, such as nutritional programs, plant restaurant facilities, health programs, etc.

Looking back on industrial history most middle-aged men can remember when the early safety campaigns were not taken seriously. It was thought that accidents were inevitable. To try to stop them was like trying to make the sun stand still. But accidents have responded to well planned safety campaigns everywhere. To those who in this day and age may doubt the virtue of better nutrition as a business investment we point to the safety programs now so successful.

Events happen fast in this global war. Places seldom heard of are now headline news. Air bases — lonely islands — harbors—convoy routes—all play parts in this greatest of wars. Yet how few persons know locations and relative positions of areas in the news. Fortunate indeed is the possessor of a world globe. The world is at his fingertips.

Can You Answer These Questions?

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2. What's the Best Air Route from Miami to Alexandria?
3. Which Is Nearer to Us by Air: Moscow, Alexandria, or Tokyo?
4. Why Is Alaska So Strategically Important?

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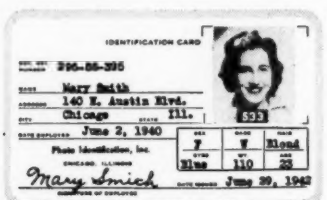

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Send me FREE sample of your Oxford Pendaflex folder and new, illustrated, fact-full booklet: "How to Cut Filing Costs 20 per cent". No obligation, of course.

NAME _____
FIRM _____
ADDRESS _____
CITY _____ STATE _____

How Buick Standardizes Methods

(Continued from page 12)

what kind of oils are subject to the lubricating oil tax and what kinds of oil, obviously similar to lubricating oils in some cases, are not subject to tax? A standard procedure tells how to determine which types of oil are cooling agents and non-taxable and which kind are lubricants and taxable. Dozens of men in the company—accountants, stockkeepers, purchasing department employees—may not know just where the lines divide lubricating oils from non-lubricating oils, and consequently which are taxable and which are not. A Standard Procedure Sheet explains all this.

With many new employees some might not know the proper procedure to acquire repair work on a typewriter. Again, it is explained in the Standard Procedure Sheet which tells when a typewriter is to be sent to the vendor for repair and when the work is to be done in Buick's own repair shop. It lists the forms necessary to prepare, gives the number of the form necessary for a pass to permit the repair man access to the department where the typewriter is to be repaired. Consulting the Standard Procedure Sheet gives all the information necessary to have the work completed.

Business Dares Washington to Match Its Will to Win

(Continued from page 9)

How long can we continue to do this? What will we do if we lose the men or women now performing this operation? What will happen to the business as a whole if we discontinue this department? What raw material is available when our present supply is exhausted? How can we move raw materials in, finished products out, if threatened transportation difficulties arrive? These are but a few questions every executive must answer if he is worth his rating as an executive. These are the biggest responsibilities he must face today, and he must be prepared to face them in volume and frequency never equaled in the past.

Despite criticism from Washington, business understands the need for drastic reductions, cuts, and eliminations. Often business understands these problems before Washington does, and faces the hardships and privations with far less grumbling and stalling than Washington expected. Business knows what to expect and intends to move everything under heaven and earth to bring the war to the earliest possible Victorious end. That Washington will occasionally ask the impossible, that its demands will fall unevenly on some industries, that its rules and regulations will seem needlessly complex and pedantic, business has already found out. But even though business grumbles there is no group anywhere so willing to do without, so willing to work hard, so willing to put its shoulder to the wheel as is business. Let Washington be sure that it displays the same willingness to forget politics as usual as business is to forget business as usual and we will get on with our one big job—winning the war.

Human Relations in BUSINESS

1,500 Employees Turn Up $3,000 Worth Of Supplies in Salvage Campaign

With each step planned, the State Farm Insurance Companies of Bloomington, Illinois, is conducting a most successful war on waste, which has turned up supplies valued at more than $3,000. Included in the salvaged material are: 146 pounds of wire paper clips, 50 pounds of rubber bands, 1,200 rubber stamps, 3 swivel chairs, 58 daters worth $2.00 each, and 99 inkwells.

The campaign began one morning when the 1,500 employees were greeted with giant letters "W. O. W." stenciled in red on the sidewalk leading to the entrances of the building and in the lobbies, and by white banners carrying the letters hung in front of the doors. All day employees were permitted to speculate as to what the letters meant. Next day a letter from G. E. Mecherle, secretary and director of personnel, explained about the war on waste.

New Treasury Flag to Honor Companies Cooperating with 10 Per Cent Plan

First company to receive the Treasury Department's newest honor, the Bull's-Eye flag, was Ex-Cell-O Corporation, Detroit. It is given when 90 per cent of a firm's employees are subscribing by payroll deduction for War Bonds equal to or exceeding 10 per cent of their earnings. Almost 100 per cent of Ex-Cell-O's employees are participating in payroll deductions.

An elaborate, morale-building ceremony was held to highlight the presentation of the flag by Frank N. Isbey, state chairman of the Michigan War Savings Committee. Governor Murray D. Van Wagoner, of Michigan, Mayor Edward J. Jeffries, of Detroit, and representatives of the Army and Navy were also present. Some 10,000 employees witnessed the well staged presentation.

Newspaper Advertisements Honor Service Men

Pitney-Bowes Postage Meter Company is taking a step forward in its employee relations program by publishing once-a-month advertisements in the local Stamford (Connecticut) *Advocate*, each of which is based on a letter received from a Pitney-Bowes service man. Each ad hits hard on one major war effort, such as War Bonds, anti-loose talk, conservation and salvage, etc. First ad in the series began "We're Right Behind You, Sgt. La Pointe!" and was written in the form of an answer to a letter from him which is reproduced.

Reprints of the ads are posted in prominent bulletin locations throughout the factory, sent to all employees in the company's thirty-nine branch offices, and mailed with explanatory letters to all former workers in the armed forces.

Munsingwear Employees Enjoy Rest Periods at Milk Bar

For the health and convenience of its employees, Munsingwear, Inc., Minneapolis, has opened a new milk bar and soda fountain adjoining its cafeteria.

This is an innovation welcomed by the firm's employees who enjoy a few minutes both morning and afternoon for refreshment. With production stepped up and the war division of the mill working twenty-four hours a day, the installation of the fountain has been an important step in answering the needs of increased personnel.

E. L. Olrich, Munsingwear's president, says that refreshment twice a day for the employees has always meant increased efficiency in work.

Business Plays Cordial Host in Welcoming Company Visitors

Jewel Paint and Varnish Company to welcome visitors to its office in Chicago has prepared a folder for distribution in its reception room listing the men in its organization. The folder tells where each man can be found, his position, the length of time he has been with the company, his hobbies, education, habits, etc.

Visitors are invited to read and take with them copies of the house magazine kept in the reception room.

Another company which tries to make the visitor feel at home is Howard H. Monk and Associates, Rockford, Illinois, advertising agency. A special 8½ by 11½-inch, two-color sheet, bearing a cartoon drawing of a busy advertising man with rush material in both hands tells visitors why they may not be given very much time. The copy reads in part: "WELCOME! If we seem to keep you waiting—if we cut our interview somewhat short, or hang rather brusquely over the ante-room gate instead of ushering you inside—please put it down to PRESSURE and not inclination. In short, we're always busy—but that doesn't mean we aren't always glad of your help."

Even the clock card has gone patriotic at Milprint, Inc., widely known packaging specialists

Medical Staff Asks Relief

An increase in the number of industrial accidents, due to the expanded size of Republic Aviation Corporation's personnel, has created such a heavy demand on the company's medical facilities and staff that it has become necessary to render only first aid and emergency treatment to employees suffering from ailments not contracted as a result of their employment. Previously, it has been the company's practice to provide hospitalization and treatment for all employees' ills in the company hospitals. Now, employees suffering from everyday ailments are asked to report to the hospitals for immediate treatment, and are then advised by the plant doctors and nurses to see their own physicians. By following this plan, the plant physicians are able to care for all emergency cases.

War Production Board Gives Awards to Sixteen Workers

Success of labor-management committees is seen in the recent gifts of sixteen more Individual Production Merit Awards to men whose suggestions have speeded the war production lines.

The Award of Individual Production Merit is the first of three awards to individuals provided by the War Production Drive. It may be given by labor-management committees within each plant. The second and third awards are the Citation of Individual Production Merit, which can be given only by the War Production Drive Headquarters and the Certificate of Individual Production Merit, which is to bear the signature of Donald M. Nelson, chairman WPB.

New winners are: Joseph Weiss, Federal Shipbuilding and Dry Dock Company, Kearney, New Jersey, for a suggestion involving the use of magnets for holding down stiffeners to ships' bulkheads, decks, etc., while tack welding.

Theodore Hamby, of the same company, for a suggestion involving the use of adjustable dies for making pipe hangers in a hydraulic press.

Hugh Hughes and William Horsbach, of the same company, for joint experiments leading to new methods of reconditioning discarded drills.

William Marshall, same company, for constructing from scrap materials a machine to weave rope sword mats, which act as supports to lifeboats on destroyers. This machine enables four men to weave the amount of matting in one day that formerly required thirteen days.

Julius Kemensky and William Leath, same company, for suggesting a holder for stanchions for use while welding them to decks, making possible an increase in production.

Otto Schlagel, Cleveland Automatic Machines Company, for a suggestion revolutionizing the processing of parts that have graduations on them.

J. G. Heiman and C. A. Westmoreland, of the Curtis-Wright Corporation, for a suggestion that bins be placed on single dollies so that parts would accompany the assembly, thus eliminating excessive stock chasing.

H. I. Ruth, same company, for suggesting rack arrangements, B. E. Stewart, same company, for introducing Masonite in construction of gigs.

Business Stresses Plans to Keep Former Employees in Service Happy

Mindful of their fellow workers now in the armed forces, employees of the H. A. Johnson Co., Boston, have pooled their efforts to see that the thirty-three men in the service receive a regular supply of things from back home. Mailings include letters, birthday letters and cards, birthday cakes, boxes of cookies and candies, cigarettes, razor blades, and miscellaneous merchandise. These letters and packs are now going to all parts of the world, and the letters of appreciation are already coming in from the service men.

In addition to this employee effort, E. C. Johnson, president, writes a weekly news letter which gives the fighters all the news from the company, including the whereabouts of employees in the armed forces.

In the latest issue of the company's *Bestovall News*, there was a 6-page insert featuring various members of the Army and Navy. Photographs and captions about each man will eventually be used in the magazine.

Carton of Cigarettes Given by Pepperell For Letter to Soldier

To encourage employees to write letters to fellow employees now in the armed forces, Pepperell Manufacturing Company, Boston, has a standing offer that it will mail a carton of cigarettes for each letter. Smokes are mailed to addressee of the letter. The soldier or sailor receives his favorite brand of cigarettes; when it becomes known that he does not smoke, he is sent candy instead.

The plan was announced following a Pepperell study which disclosed that its former employees now in the armed forces want letters more than anything else. By keeping in contact with its former employees, the company found that the men did not care what kind of letters they received but they wanted letters so they might feel they are not being forgotten back home.

As a result of this offer, many employees are writing letters that would never have been written, because they realize that each letter means a carton of cigarettes.

Billboard Lists Employees in Armed Services — Photo Sent to Men

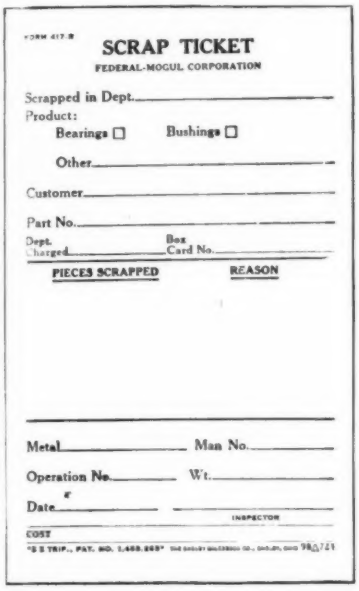
In Cedar Rapids, Iowa, home of La Plante-Choate Company, there is a huge billboard which lists the name of every former employee of the company now in any of the armed services. As a reminder that the company has not forgotten the men, pictures, showing the billboard, with the men's names plainly in view are sent to all the men whose addresses the company has on file. As new names are added to the billboard, new photographs are made and photos sent to the men whose names have recently been added.

Many similar plans are in effect elsewhere, and by other companies. House organ editors have done an excellent job in rounding up pictures of former employees now in the service, printing these pictures and forwarding company magazines to former employees. Other companies list men who have gone to the armed services in newspaper advertisements published regularly in local newspapers.

Some stores whose salesmen have gone to war have assured customers that commissions would be credited to salesmen. One Chicago men's furnishing store recently sent a letter to all customers of a popular salesman who had just enlisted. The letter pointed out that the salesman's friends and customers could do him a favor by mentioning his name whenever they bought anything in the store. This mention would guarantee payment of commission to the salesman, and in no way affect the earnings of the salesman who served the customer.

SYSTEM and Business Management Ideas

Have you found a better way to perform some management activity? This department is a clearing house of ideas and methods that short-cut routine or increase sales. Regular space rates will be paid upon publication for each contribution used



SCRAP TICKET

FEDERAL-MOGUL CORPORATION

Scrapped in Dept._____

Product:

Bearings ☐ Bushings ☐

Other_____

Customer_____

Part No._____

Dept. Charged_____ Box Card No._____

PIECES SCRAPPED | REASON

Metal_____ Man No._____

Operation No._____ Wt._____

Date_____ INSPECTOR

COST

1. Scrap Ticket Provides Record of Waste

FOR an accurate check on waste and a permanent record of critical materials, required by the War Production Board, Federal-Mogul Corporation, Detroit, Michigan, has developed a special "Scrap Ticket," which is filled out by the foreman of the department in which the scrap material originates. The complete form consists of four copies, which, when filled in, are torn apart in the middle, leaving two sets of two copies each. The foreman keeps one, a tissue copy, and the original goes to the office where costs are figured and charged back to the job number or customer ledger. The other two copies, with carbon intact, are sent to the inspection department where the materials are rechecked for any irregularities and further notations made by the inspector. One copy remains in the inspection department, and the fourth is sent to the planning department where the records are broken down according to job numbers, some of the information being used to make cost revisions and to keep an accurate record of critical materials which are on strict priority bases. The form was designed by the Shelby Salesbook Company.

2. Vocational Guide Aids Labor Recruiting

COMPILING exact information on the relation of certain peacetime skills to wartime shipbuilding for distribution to the general public as well as applicants helps materially to ease labor shortages at the Seattle-Tacoma Shipbuilding Corporation, Seattle Division. H. Stubbs, director of in-plant training, compiled the unique "vocational guide," and it is largely distributed through requests originated from a radio program, "Your Work Is a Weapon," an educational feature of a local radio station. Effective distribution is also made at the gate, where applicants for work often erroneously appear instead of registering at local hiring halls of the respective unions.

In one column of the booklet are listed the basic trades of peacetime industry with the various related crafts found in the shipbuilding industry opposite. The booklet translates a total of sixty-three peacetime skills into active war production. By checking these columns the outside craftsman learns where he may employ his basic skill and training to the best advantage in the current shipbuilding program.

In addition, there are tabulated the names of local unions having jurisdiction over each separate craft found in the yard, the initiation fee for a helper, the dues, and the location of the union where application is made.

3. Hallowe'en Pranks Turned to Advantage

FOR years merchants have been annoyed at Hallowe'en time by children smearing their windows with soap. I. N. Frost of Barnett's Store, Inglewood, California, has turned this irritation into a profitable publicity stunt. He offers in newspaper advertisements prizes for the children who draw the best soap pictures on his windows the evening of October 31. He claims that they will smear up his windows anyway, so why not turn the occasion to good account and good-will?

Some two hundred 18-inch squares are marked off on the store's windows, and the children flock in droves to take advantage of this unique offer. All squares are filled soon after being outlined, with would-be contestants having to watch because all space has been taken. Prizes are: First prize, $5.00 in merchandise; second prize, $3.00 in merchandise; and ten honorable mention awards of tickets to a motion picture show.

4. Keeps Record of Employee Progress

AS PART of its regular personnel routine, Chicago Mail Order Company maintains a progress card for each employee. On this card is recorded each conversation held between an employee and his or her supervisor. At least once a month, supervisors make it a point to talk to each employee about his work and aims. These records include notations of raises and their reasons, changes in position, suggestions made to and received from employees, grievances, complaints, accomplishments, short-comings, etc. Over a period of time the facts on these cards will eventually reflect an employee's character and ability.

Periodically these "Progress Records" are reviewed in the industrial relations department where all filled sheets are permanently filed, and promotions and wage increases may be made from information recorded on these forms.

5. Time-Saving Forms In Personnel Work

TRANSFERS, rate changes, vacation slips, tool crib charges, and many other printed forms used in personnel work are often made up in old style padded, cut forms. To prepare such forms in triplicate and quadruplicate requires much stuffing of carbon paper, jogging and deleaving. Snap-out, one-time carbon forms are great time savers for this work and many employers have modernized all forms for this work. With the overworked condition in most personnel departments and payroll departments, this saving is important.

New SYSTEMS and EQUIPMENT

Remington Rand Wood Kardex Equipment

KARDEX visible filing equipment made by Remington Rand Inc., is now available in wood. Cabinets, slides, slide pulls, and even slide hinges are made of wood, with the only metal being used for label holders and fastening screws. Designed wherever practicable to match existing installations of steel units, the equipment can, in most cases, be added to present equipment without affecting either uniformity of appearance or performance. Remington Rand stresses the fact that wood is being used as an "alternate" material rather than a substitute, and that this equipment is built for permanent use.

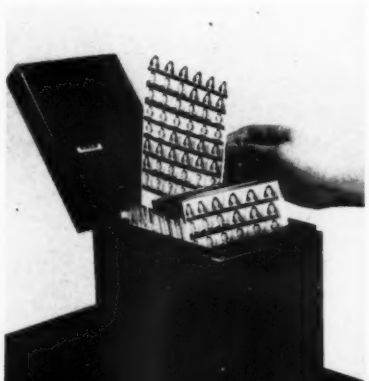
Other Remington Rand equipment available in alternate wood are Kolect-a-matic visible record equipment; Guardsman wood filing cabinets in two-, three-, four-, and five-drawer heights, with substitute drawers to accommodate 6 by 4 and 5 by 3-inch cards; a special eighteen-tray tabulating card cabinet; and a six-drawer unit to house 8 by 5-inch cards.

Wood Chair Mechanism To Replace Chair Irons

SWIVEL mechanism for office chairs made of wood has been patented by the Sikes Company to replace chair irons. The chair spindle is made of specially impregnated straight grain maple, and the solidly constructed hub is laminated wood into which are firmly set two graphite-impregnated plastic bearings which provide lasting lubrication. Chairs equipped with this new mechanism have been named "Velveturn," and are now in production.

File for Master Copies of Identification Photos

A FILE system for master copies of identification photos which saves both finding time and space has been devised by Photo Identification, Inc. This company makes master file sheets, 8 by 10 inches, on which are printed twenty-four photographs. By using these master sheets, many individual photographs can be filed in a comparatively small space and much time thumbing through individual card files is saved.



Improved Scales for Use In Mail Rooms

TWO new postal scale models have been developed by National Postal Meter Company. One model (illustrated) is a streamlined, pendulum-type scale that automatically weighs and indicates exact postage for all classes of mail: Air mail, first class, third class, parcel post, and foreign. It is furnished in two capacities: 20 ounces and 3 pounds. The inverted fan-type chart shows figures in wide, easy-to-read graduations, and the hair-line indicator is narrower than the graduation marks, allowing the operator to split the line.

The second model is a low, cylinder-type parcel post scale which will weigh any package up to the allowable limit of 70 pounds.

Substitute Material for Typewriter Platens

A NEW material for typewriter platens is announced by the Rodic Rubber Corporation. This company is manufacturing a typewriter cylinder jacket which does not contain any rubber, but looks and feels like rubber. However, this composition material does not swell after contact with stencil oils, will not pit, and will not, after a few months' use, develop a harder density. The result is smooth typing, long wear, and a solution to the rubber problem.

"Inter-Com" System Has Interceptor Station

EXECUTONE, INC., announces a new executive-monitor intercommunication system consisting of two or more master stations connecting up to nineteen remote stations. The executive and monitor, or interceptor, stations can talk to each other, or either can carry on two-way amplified voice conversations with remote desk or trumpet-type substations. Important feature of the system is that the assistant at the monitor station can intercept all incoming calls originating at the remote stations, sift them, and transfer the most important to the master.

Typewriter Pedestal Fits On Drawer Ends

COMMERCIAL FURNITURE COMPANY is marketing a Right-O-Left typewriter platform which converts any flat top desk into a typewriter desk, by clamping on desk drawers, either in the right or left pedestal. It clamps on quickly without damage to the desk, forming a rigid platform for smooth typing operation. It fits into any standard office desk, single or double, wood or steel, new or old, with 11½ to 14-inch pedestal.

Two-Lens Camera for Identification Cards

FOR identification purposes, National Photo Identity Corporation has perfected a new type of camera which photographs the filled-in identification card and a person simultaneously on one film by means of two lenses. A card with the name, address, age, height, Social Security number, or any other information wanted is filled out and placed inside the camera while the person to be photographed sits in front of the camera. Both images are projected on one film unit to complete the finished, tamper-proof identification card. Also, from the same negative, badges can be made using only the portion of the negative showing the individual's photograph. The accompanying illustration shows the filled-in identification card ready for photographing in the cutaway portion of the camera, while the person to be photographed sits in front of it. The machine is foolproof and does not require trained operators.

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Insertable labels in perforated strips for typing.
2 Sizes, 1 in. wide and 2 in. Tops straight, or bent back.
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Samples (5 or less) 2 cents each
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For bulletins to salesmen, sales letters, collection letters, special letters to customers, and dramatized mailings of all kinds. 400 ideas and 400 colorfully illustrated letterhead samples you can use, costing over $10,000. Yours for $3.00. Sent on approval. Prize and Contest Department.

DARTNELL CORPORATION
4660 Ravenswood Avenue
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Business TIPS

The following literature is of special interest to executives active in business management. Unless otherwise stated, it will be sent upon request to either the company or editors of AMERICAN BUSINESS.

ANYONE owning patents will be interested in a pamphlet prepared by the Boston Patent Law Association, *Patents, Congress and the Nation.* This discussion deals with the two laws concerning patent rights currently before Congress and their results if passed. These patent laws are being widely discussed and if you are not familiar with them, this booklet will give you necessary information.

* * *

THOMAS A. EDISON, INC., has prepared a booklet, *Making Your Ediphone System Serve Your Wartime Needs,* which is just what its title implies—a user's manual. It is divided into three sections. The first part deals with dictating habits for the executive; the second section takes up the care of Ediphone equipment; and the third section outlines the various services which Ediphone dealers are prepared to render. In each instance, when a service is mentioned, suggestions labeled, "We Can" and "You Can," are made so that the reader can understand how the service operates.

* * *

PLAIN FACTS ON WARTIME CARE OF RUBBER V-BELTS is a maintenance manual published by Allis-Chalmers Manufacturing Company to help solve the maintenance training problem encountered by industries employing many new people. The booklet starts from scratch, assuming that the reader knows nothing about V-belts and begins with the anatomy of a V-belt and the principle of the V-belt drive. Instructions are given about obtaining proper tension, what to do about worn sheaves, and what determines the life-expectancy of V-belts. At the end of the booklet is a chart which gives causes and prevention of seven different kinds of V-belt wear, with pictures to show each injury.

* * *

ANOTHER edition of the Hinde and Dauch Paper Company's "Little Packaging Library" is now available. Called *How to Ship More Economically in Corrugated Shipping Boxes,* this small pamphlet covers every phase of shipping from the delivery of the corrugated boxes to the shipper, through storing, packing, sealing, stacking, and loading, until the packed boxes reach their destination. The section dealing with storage gives pointers about temperature and humidity control in storerooms where corrugated boxes are kept. The transportation and damage loss problems are discussed, with suggestions to prevent undue damage loss in transit.

* * *

TO EXPLAIN to Mr. Average Citizen the reason for the need for scrap, the American Industries Salvage Committee has prepared a leaflet, *What's What on Scrap?* It is written in question and answer form and deals primarily with the use made by the steel industry of scrap iron and metals. In simplified, non-technical language it explains the process of making steel and tells where scrap metal enters into the picture.

* * *

FEDERAL ELECTRIC COMPANY, INC., is distributing a folder on its air-raid sirens, describing the four types available from that company and giving information about the installation of an air-raid alarm system. The location of sirens is discussed, as well as the operation of the system and controls available. Three diagrams show different types of siren systems.

* * *

FOR plant engineers and executives in charge of plant protection, the discussion, *Blackout, Air Raid Damage and Glass Splinter Protection for Industrial Plants,* will be helpful. It cites British experience with bomb damage and shows protection afforded by Ozite Air Raid Safety Blanket and Ozite Blackout Blanket. Nine different methods of installation of these materials for different types of windows are suggested, with drawings to illustrate. The booklet is available from Clinton Carpet Company.

* * *

SYLVANIA ELECTRIC PRODUCTS INC., has issued a new fluorescent lighting fixture catalog designed to simplify the problems of selecting the proper types and quantities of fixtures. Thirty models are illustrated, complete with technical specifications, as well as a list of recommended minimum standards of illumination, information on how to plan a fluorescent installation, and pictures of actual applications. A double-page spread is devoted to general information about Hygrade Sylvania fluorescent products.

* * *

ISSUE No. 8 of the *Acme Process News,* published by Acme Steel Company, shows steel strapping in use by various types of shippers. Illustrations show such products as candy, brick, furnaces, meats, and mosquito netting packed and strapped ready for safe shipment. Almost all applications shown pertain to products going to the armed forces.

* * *

SHAW-WALKER COMPANY'S new booklet, called *Machine Tools for the Office,* is a short catalog of the company's filing equipment available to the Army.

Navy, U. S. Maritime Commission, and war plants. The seven different types of filing systems this company can install are described, as well as the fireproof files. Other equipment shown includes the Wobble block for fast point-of-reference information and the Expandex device for evenly dividing cards in a file. A double-page spread shows how Kopi-Spot, the Shaw-Walker method of making all four payroll records in one operation, works.

* * *

GIFTS for soldiers—eighty of them, all illustrated and priced in a handsome Gift Canteen Catalog booklet, published by Marshall Field and Company, Chicago department store, will help solve the problem of what to send that soldier in camp or at the battlefield. The booklet will be especially useful to personnel department committees charged with selecting gifts for former employees, now in armed services.

* * *

FATIGUE VERSUS EFFICIENCY is the title of a helpfully interesting book just produced by the American Bottlers of Carbonated Beverages. The booklet describes the causes of fatigue in the home, in business, industry, and in schools. It shows the value of work pauses, refreshments, diet, and offers suggestions for combating fatigue. Obviously, carbonated beverages are suggested as one enemy of fatigue.

* * *

SCRAP and how to collect it is the subject of a recent comprehensive booklet issued by the American Industries Salvage Committee. This is a more extended treatise than is found in the leaflet mentioned in another column of this department. It was completed only last month and will be helpful to all scrap committees in business and industry. It reveals some unsuspected and often overlooked sources of scrap and tells how to organize to bring in more scrap.

* * *

PUBLIC RELATIONS, all-important topic today, is also the title of a little publication issued by The Institute of Public Relations, Inc. There are a number of ideas worth thinking about in each issue. Want to be put on the mailing list? Just say the word on your business stationery.

* * *

BOXES—wood, paper, corrugated board, and other materials are used by Hinde and Dauch Paper Company, one of the country's truly large box and carton makers. The company's *Package Laboratory News*, number 4, is just out and a copy will be sent to executives responsible for shipping and container decisions.

* * *

Please send requests for copies of these booklets on company letterheads. Requests on postcards will not be forwarded.

THE BUSINESS MARKET PLACE

It will pay you as a reader of AMERICAN BUSINESS to read these announcements. Answer those that interest you, so that the advertiser can present the full facts of his proposition by mail. If you have something to advertise yourself, send in your own sales message. The cost is small. RATES. *Ordinary Classified.* 20 cents per word. First line in six point boldface type and centered —$1.00. White space $1.00 per agate line. *Display Classified.* 1 inch: $14.00; ½ inch: $7.00. $12.00 and $6.30 respectively on 12-time contract. Terms: Cash with order unless credit references are submitted and approved. Forms close 20th of preceding month. Published 1st of month of issue.

Incorporating Services

DELAWARE CHARTERS: Complete service $35. Submitted forms. CHAS. G. GUYER, INC., Wilmington, Delaware.

DELAWARE CORPORATIONS organized and represented; request free form. COLONIAL CHARTER COMPANY, Wilmington, Delaware.

Postcard Advertising

Make your POSTCARD ADVERTISING dynamic, colorful, attention-arresting! Economically priced FLASH POSTCARDS will give your message the "punch" it needs to knock over sales. Send for samples. KUPFER PRINTING COMPANY, 503 South Jefferson Street, Chicago, Illinois.

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SALARIED POSITIONS—$2,500 to $25,000
This advertising service of 32 years' recognized standing negotiates for positions of calibre indicated. Procedure individualized to your personal requirements. Retaining fee protected by refund provision. Identity covered. If salary has been $2,500 or more send for details. R. W. BIXBY, INC., 201 Delward Bldg., Buffalo, N. Y.

For Sales Managers

SALESMEN'S APPLICATION BLANKS used by more than 900 leading companies for quickly grading applicants for sales positions —4 pages—$6.00 per hundred. Also expense account forms, reference forms, auto expense account forms, etc. THE DARTNELL PRESS, 1801 Leland Avenue, Chicago.

Used Business Equipment

WHAT OFFICE EQUIPMENT DO YOU NEED or want to sell? We buy and sell all kinds of office equipment, specializing in Visible Equipment, such as Kardex, Acme, International Visible and other makes. Write us.
E. H. HEINEMAN, 4 N. 8th St., St. Louis, Mo.

ELLIOTT FISHER, Moon Hopkins, Adding, Calculating, all makes office machines. ROBERT NOVAK, 529 So. Wells, Chicago.

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MIMEOGRAPH, Multigraph, Addressograph, Folder, Dictaphone. Send for Free bargain circular on office machines. PRUITT, 37 Pruitt Bldg., Chicago.

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EVERY FONT is carried in stock and is made from a hard foundry metal, assuring the customer of a clear, sharp appearance and perfect alignment—these are of vital importance for any printed matter. Send for catalog A containing 40 pages of modern type faces, borders and specials; including printer's type for the Flexo or No. 59 typesetter.

MULTIGRAPHERS COMPOSING CO., INC.
638 S. Federal St., Chicago, Ill.

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YOUR AGENTS, mail order advertisement inserted all newspapers, magazines. Publishers' rates. MARTIN ADVERTISING AGENCY, 171B Madison Avenue, New York.

Advertising Services

ADVERTISING COPY, LAYOUTS, literature, expertly prepared. Send complete particulars for estimate and advice. ROBERT PETERSON, 400 W. Madison, Chicago.

Mailing Lists

KNOWN MERCHANDISE BUYERS! Scores of proven lists, 1942. RABIRO SERVICE (AB), 228 2nd Street, New York.

Accountants

ACCOUNTANTS AND BOOKKEEPERS. Real profit from new type bookkeeping service. Write ASCO, Box 1468, Springfield, Mass.

Printing of All Kinds

Hammermill Bond Letterheads — 500, $2.50; 1000, $4.00. Office forms of all kinds. EATON PRESS, Gardner, Kansas.

Credits and Collections

LEARN ACCOUNT COLLECTING. Good income; quick results. Interesting folder free. NATIONAL COLLECTORS ASSOCIATION, Newark, Ohio.

Inventions for Sale

EXPLOIT NEW INVENTIONS and make money. Write for our free classification sheet of inventions for sale. ADAM FISHER CO., 41 Enright, St. Louis, Mo.

Financial

CAPITAL SEEKERS—Interested in raising $25,000 or more for a legitimate project should write to AMSTER LEONARD, Fox Theater Bldg., Detroit, Mich.

Salesmen Wanted

SELL chemically treated press cloth, nationally advertised. The WEAVER PRES-KLOTH is sold in all leading department stores. All cloths are individually enveloped, and distinctly priced at 69c. Your cost is 35c. Send 35c for sample and full particulars. MARCUS CLOTHING CO., 2130-34 Gravois Ave., St. Louis, Mo.

400 Dramatized Letterheads

These colorful striking dramatized Dartnell letterheads are used by over 10,000 companies for a wide variety of purposes. Printed by letterpress in two and three colors, quantities of each design are kept in stock. Cost runs from $3.60 per hundred up. A sample set of four hundred full-size letterheads in color, from which you may order supplies and which you may keep in your file as an idea source. Complete, $3.00.

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FROM SABOTAGE?

Do you know just how easy it is to forge employee identification cards? Do you realize that in the hands of an enemy agent most identification cards can be retouched, rephotographed or changed in such a way that even an expert cannot tell the forgery from the genuine? Every plant operates in the shadow of saboteurs. Is your plant **REALLY PROTECTED?**

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Forms close in Chicago the 15th of the month—issue in circulation the 1st of the month

THE DARTNELL CORPORATION
Publishers
4660 Ravenswood Avenue, Chicago

NEW BOOKS *for Executives*

HOW TO DICTATE BETTER LETTERS. James P. Grady and Milton Hall. Packed into 118 small pages is just about all the letter dictating advice and instruction any man, with brains enough to blow hot soup, needs to become an effective dictator of letters, or better still a dictator of effective letters. The trouble with the man who dictates letters in the average business is that as he begins to write letters he imitates the man who had the job before him. And that man got along well imitating his predecessor. Because of this lazy way of training the men who write America's business letters, letter writing generally refuses to adopt any new ideas—it sticks to the expressions, phrases, forms, and pedantry of the nineteenth century. Oh, you don't believe it—nothing like that happens in your office! Well, we dare any business man to put a copy of this book in the hands of any average letter writer and compare his present output with the suggestions for improvement in the book. There have been many books on preparing letters. Much of the advice is not new, and many of the suggestions are neither new nor original, but we recommend the book because it is brief, concise, well put together, and does not require an extended vacation to read. Harper and Brothers. $1.50.

PLASTICS. By J. H. DuBois. Here, thank the good Lord, is a book on plastics which can be read without a chemical dictionary at your elbow, and which makes sense to a plain business man who only remembers a small part of his high school chemistry. Despite the simplicity of the book it is authoritative. You will find plenty of those tongue twisters such as butadiene, copolymer, polystyrene, methyl methacrylate, but the way the author builds up to these words and gives you the basic facts about plastics, defining fundamentals and terminology, before he jumps into this kind of language enables you to take these words and other technical terms and facts in your stride as you reach them. The book tells about the different plastics, how they can be used, molded, injected, cast, machined. He tells the properties of the different plastics, and lists the trade names of the various general types of plastics. Sooner or later almost every business man is going to have to reach some decision involving plastics, even if only to decide whether he wants a plastic or a metal cup for a thermos bottle. But more often than not, these coming decisions on plastics may mean the difference between a loss and a profit to the business. For an answer to most of the plastic problems the average business man will have to make, we heartily recommend this well illustrated, well printed 295 page book. American Technical Society. $3.00.

PERSONNEL SELECTION BY STANDARD JOB TESTS. Charles A. Drake. Two years ago AMERICAN BUSINESS published a story about the Humm-Wadsworth tests being used at Lockheed Aircraft in selecting employees. This article brought more letters to the editor than any article published that year. All the letters asked for were the tests used. We were unable to send the tests, but to those readers who want a set of tests here is the answer. There are many tests described and illustrated in this book, with a chapter telling how to construct tests. An important contribution to the literature on aptitude and skill testing which most personnel men will want to study. McGraw-Hill Book Company. $2.00.

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